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Journal of the American Veterinary Medical Association

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VOL. CV

OCTOBER, 1944

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The Chicago Session

THE OFFICIAL proceedings of the eightyfirst annual meeting, held at the Palmer House Aug. 22-24, 1944, appear elsewhere

in this issue. The Chicago session was the third of a series of "veterinary war conferences," so named because the programs were of selected subjects concerning the war effort. The speakers were energetic specialists in the fields related to the production of food and the supervision of its safety and nutritional value. The meeting was inseminated with the dignity of an occasion important to a world at war. It was seriously conceived, studiously planned, and fruitfully carried out.

Despite restrictions on railway travel, rationed gasoline, the almost total absence of federally employed

members, below normal percentage of women present, curtailed distractions, and miscellaneous impediments of the war, the attendance was 1,563, including 998 veterinarians and 339 women. And there were 34 technical exhibits by commercial firms from coast to coast displaying the biological,



President James Farguharson

pharmaceutical, surgical, nutritional, and bibliographic matériel used in the practice of veterinary medicine. Nation-wide inter-

est in the meeting was shown by the activities of the press room. The releases on the passing events of the meeting prepared for the local and agricultural publications were popular with the reporters and as the clipping service attests, they were widely distributed throughout the country-the signal of increasing public interest in the work and achievements of the veterinary serv-In these and other respects, the Association reached a new high at the meeting of 1944.

Notwithstanding that the present meetings of the AVMA are the annual maneuvers of an army engaged in

fighting the "Battle of Food" for the United Nations, the Office of Defense Transportation had urged cancellation of this meeting (and all other conventions) on the ground of military expediency. On precisely the some ground, the Executive Board, convinced that the veterinary problem of the

United States had not been weighed by ODT in making the plea, decided to carry on as a public duty. An echo of the government attitude was the regrettable absence of federal functionaries at the meeting. Their influence and guidance was missed, by and large. The work of the meeting to be pub-



Dr. W. A. Young

lished during coming months is submitted for analysis as to its relation to the public weal.

The Opening Session

The meeting opened with the colorful ceremonies that have characterized AVMA sessions for years, including the presentation of awards.

ADDRESS OF WELCOME

As Governor Green was prevented at the last moment from attending, Dr. W. A. Young, director of The Anti-Cruelty Society of Chicago, delivered the address of welcome (see "Proceedings" in this issue) in which was pointed out just what the veterinary profession means to the Americas and the rest of the world, without which (quoting) "the world would be very, very hungry indeed."

RESPONSE

In response, Congressman George W. Gillie of Indiana, spoke as follows:

MR. PRESIDENT, DR. YOUNG, AND FRIENDS:

I have been charged with the very pleasant duty of expressing to you, Dr. Young, the sincere thanks of the delegates of this convention for your generous address of welcome. We know that out of the deliberations of this convention will come ideas and programs of immeasurable benefit to the well-being of the people of this state, of all America and of the world.

This year the American Veterinary Medical Association is again assembled in convention in the midst of terrible global warfare. As veterinarians, and as citizens, our thoughts and efforts are still concentrated on the major purpose of early and complete victory over the



Congressman George W. Gillie

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Axis. The main emphasis of this convention, as of recent past conventions, will be devoted to maximum participation of our profession in the war effort. At the same time, however, we shall develop and stress our part in the solution of the weighty problems which will confront postwar America. We are heartened by news of the advances of the Allies on all fronts to the hope that this may be our last wartime convention.

This—then—is a pivotal convention of our association. At this point, we can consider with pride our accomplishments during the past quarter of a century, and particularly during this vast war, and we can at the same time

anticipate and prepare for our rôle in the postwar period.

The war brought responsibilities to the veterinary profession which demanded complete mobilization of the profession if we were to guarantee that the food supply of this nation would meet the exacting requirements of war. And the problems of the peace will demand similar concentration of our efforts and abilities on two fronts: the health front and the economic front. We shall not fail to devote our professional skills to the health and abundant living of our people and to prosperous peacetime agriculture, as we have not failed to meet our wartime responsibilities.

As a member of Congress during this war period, my activities have been concerned with the legislative business of our national government. I have, however, followed with great interest and close attention the accomplishments of my colleagues in the veterinary profession. And I take advantage of this opportunity to tell you that I have been proud of your record in these critical and demanding days.

I am proud that our soldiers and sailors and all our fighting men and women are assured that the food they eat is clean and wholesome.

I am proud that our country's livestock industry—the largest and healthiest in the world—has been able to meet the wartime needs for maximum production of food for both civilians and the armed forces of the United Nations.

I am proud that our nation has continued to be well-fed even in the midst of this awful war, and that her health has been scientifically guarded above that of all other nations.

I am proud that scientific veterinary research and experimentation—out of which have come discoveries of untold benefit to mankind—have gone apace during this war period.

I am proud of our Army Veterinary Service which has done such a valiant job in maintaining the high standards demanded of the food supply which goes to our armed forces, and in caring for the many animals necessary even in a highly mechanized war.

I am also proud that our veterinarians in the federal government have at long last received some measure of the recognition and compensation which has long been due them. I refer to the recent action of Congress in passing legislation raising the status of veterinarians in the federal service. I shall not go into the details of the over-long struggle to bring this about, but I will say that this tardy action came as a result of the most diligent and concentrated efforts of the AVMA, in co-operation with livestock associations and others. The thanks of the entire veterinary profession are due Dr. Bower, Dr. Hardenbergh, Dr. Brumley, Dr. Hagan, other officers of the Association,

and Mr. Will J. Miller, president of the Kansas Live Stock Association, for their intelligent and effective devotion to this cause. The veterinary profession as a whole has benefited by this recognition of our federal veterinarians.

Such recognition is gratifying, of course, to us as veterinarians, but in the longer—less personal—view it has even more significant implications. It is obvious that recognition of our profession in all its vital aspects brings with it understanding, on the part of all, of the benefits of healthy livestock and high pure food standards to our national welfare. This understanding is a safeguard to our profession and a protection to the health of the nation.

When I look back over the past twenty-five years or so of veterinary history, I am struck by the tremenous strides that have been made. I know that our professional accomplishments and advancement have been in large measure a result of hard work and distinguished service on the part of the members of this association. With this illustrious record in mind, I bring you the message of Evelyn Simms in the Bridge Builders. It seems to me that this poem might well have been written about the members of this association.

They have builded magnificent bridges
Where the nation's highways go;
O'er perilous mountain ridges
And where great rivers flow.
Wherever a link was needed between the new
and the known,
They have left their marks of Progress, in
iron and steel and stone.

There was never a land too distant,
Nor ever a way too wide,
But some man's mind, insistent,
Reached out to the other side.
They cleared the way, those heroes, for the
march of future years.
The march was Civilization—and they were
its Pioneers.

And what had gone to the making?
Courage and sacrifice,
And a thirst that knows no slaking
For the Right at any price;
Comradeship, caring nothing for riches or
rank or birth,
For builders like these build only with things
of eternal worth.

In conclusion, I thank you again, Dr. Young, on behalf of this convention, for being with us and for inspiring us with your message as we begin our deliberations.

President Bower's address (published in the September issue) was without a dull paragraph, being based throughout on longtime personal experiences in the field of practice and an extensive itinerary during his presidential tenure. One heard impres-



President Chas. W. Bower

sive comments on the usable ideas Dr. Bower expounded.



Mrs. J. C. Schoenlaub

GREETINGS FROM THE WOMEN'S AUXILIARY

Mrs. J. C. Schoenlaub, Memphis, Tenn., president of the Women's Auxiliary, in her "Greetings from the Auxiliary" (see "Proceedings" in this issue), reminded the

women of the veterinary profession of their obligations to a world at war as well as to their communities. Quoting: "We cannot sink back into the complacency of the prewar attitude. What has gone on in the past and what is going on now will influence our lives and the future of this country for generations to come. . . . It is going to take vision to anticipate the needs of the future. . . . We must build firmly on the threshold of a new era."

PRESENTATION OF AWARDS

In presenting the President's Certificate to Dr. Charles W. Bower, and the President's Key to Dr. James Farquharson, Dr. O. V. Brumley, chairman of the Executive Board, in the line of duty, remarked:

PRESENTATION OF PRESIDENT'S CERTIFICATE

President Bower, you have labored enthusiastically and efficiently in the interest of the American Veterinary Medical Association dur-



Dr. O. V. Brumley presenting Dr. Bower with President's Certificate.

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ing this past year. Your presence in practically all corners of the United States at association meetings during this period has created much good will, has strengthened the local and state organizations and naturally has brought to the attention of the profession in general the functions and aspirations of the American Veterinary Medical Association in working at all times in their behalf. In this work you have devoted practically your entire time to the Association and have given freely of your knowledge and experience on all occasions.

You have instituted many new procedures for the Association which have received enthusiastic support, inaugurated a postwar planning program which will pay rich dividends in the immediate years to come; you assumed real leadership in connection with many other problems which were presented for solution during the year; for all these things you deserve the commendation of the entire membership of the American Veterinary Medical Association. You have carried on the splendid traditions of the office of president and have given it added prestige, dignity, and efficiency. Your many friends salute you on this occasion and the entire membership of the American Veterinary



Dr. O. V. Brumley presenting President-Elect James Farguharson with President's Key.

Medical Association appreciates your faithful and efficient efforts in their behalf. Although your term as president ends at the close of this meeting, may you always retain the same enthusiasm for the benefit of the Association and the entire veterinary profession, and continue to be their ambassador of good will and a leader.

May I, therefore, in behalf of the Executive Board present to you a Certificate of Proficiency as president of the American Veterinary Medical Association and with it the esteem and thanks of the entire membership.

PRESENTATION OF PRESIDENT'S KEY

Dr. Farquharson, you have made an enviable record in serving the profession during the past years. You have been outstanding in educational work, also as a practitioner. A leader of the veterinary profession in your state, you have, by your educational programs, become known throughout North America. You have contributed much to the knowledge of the profession by research, by addresses, by practical demonstrations at group meetings, and by your enthusiasm in developing numerous films depicting many of the diseases of livestock and various surgical techniques. As a result of your efficient efforts along these lines, you have become an outstanding leader in the profession.

It is natural, therefore, that your hosts of friends would recognize your efficient services and elevate you to the highest honor possible in the profession—the presidency of the American Veterinary Medical Association.

Therefore, it is an unusual honor and pleasure for me on this occasion, in behalf of the Executive Board and the membership at large of the American Veterinary Medical Association, to present you with the President's Key. This is a signal honor. May it open the doors of opportunity to you for further service, and be symbolic of the esteem and affection in which you are held by the membership of the Association.

TWELFTH INTERNATIONAL VETERINARY CONGRESS PRIZE

The Twelfth International Veterinary Congress Prize for 1944 was awarded to Dr. D. F. Luckey of Missouri for distinguished service rendered to the livestock industry of the United States by having promulgated and defended the facts concerning the applicability of the intradermal tuberculin test in cattle, and thereby helping to establish a means of eradicating bovine tuberculosis on a nationwide scope. In presenting the award, Chairman Brumley stated:

Doctor Luckey, speaking for the Special Committee on the Twelfth International Veterinary Congress Prize, it is my pleasant duty to award you this token and to see that this event is



Dr. D. F. Luckey receiving the Twelfth International Veterinary Congress Prize.

promulgated on the permanent records and to the world at large. It represents the Association's impartial analysis of the contributions you have made to your profession and country. Although it may seem that you have been summoned here to be honored for having demonstrated a practicable method of detecting incipient bovine tuberculosis in the field which obviously contributed fundamentally to the eradication of that plague in the United States. the sound principles you have laid down and vigorously defended in the field of livestock sanitary science have not been overlooked. As a matter of fact, Doctor Luckey, you are here as a veterinary livestock sanitarian-a pioneer of many years experience—who has never yielded ground to subversive practices. You have lived to weigh the fruits of your doctrines and to enjoy watching them blossom into a vast livestock population, needful and sufficient in the midst of a great war. It is an honor

to pay tribute to your achievements, for your teachings and practices, difficult as they are to enforce, are the inevitable patterns veterinary science must follow in the pursuit of its task. Your rational approach to the hog-cholera problem is commendable and you have demonstrated on a large scale that the disease can be eradicated through the enforcement of regulations based upon the present knowledge of the disease. But what particularly impressed the Committee is the fact that in the absence of your extensive trials of the intradermal tuberculin method, controlled by checks and abattoir autopsies, bovine tuberculosis eradication would have been long delayed. It was your steadfast confidence in your personal observations to which the American people are indebted for their practically nontuberculous bovine population. It is an honor to honor you.

In accepting the award and thanking the Association for the honor conferred, Dr. Luckey gave a brief history of his work (see "Proceedings" in this issue), observations, and reports from March, 1911 until 1921, when that test was officially recognized by the federal service, at the Bovine Tuberculosis Conference held in Chicago during that year (1921). What is not generally known, Dr. Luckey remarked, is that both the Canadian and American governments in 1914 rejected the intradermal tuberculin test in official documents. "When," said the doctor, "I received a circular from our Bureau of Animal Industry stating that the intradermal test was not reliable, you can scarcely realize how discouraging those reports were to me."

BORDEN AWARD

For the first time, the Association cooperated with an outside agency in rewarding a member for distinguished service. The prize was awarded by the Borden Company of New York, on nomination by the AVMA Committee on Awards, to Dr. I. Forest Huddleson, Michigan State College, following remarks by W. A. Wentworth, director of Industrial Relations of the Borden Company:

The Borden awards were established by The Borden Company in 1936 to provide appropriate recognition for individuals who have made outstanding contributions in research, and in the hope that they might stimulate further research. Scientific and professional societies, operating in fields related to the food industry, were invited to administer these awards. In a brochure, reviewing the awards made by these

societies up to the close of 1943, the following paragraph appears:

"It is nowhere more apparent than in the food industry that progress is based upon continuous experiment and research. Food chemistry, biochemistry, human nutrition, animal physiology and genetics, agricultural production, animal feeding and other related sciences all play important parts. Application by the food industry—producer and processor—of the results of research in these fields has brought about a wider distribution of better food products. Accompanied by a growing public understanding of improved diets, this is resulting in a better-fed nation."



Dr. I. Forest Huddleson receiving the Borden Award.

This statement adequately presents the background of thinking within the company in establishing these awards. Certainly no dairy company can properly serve the public welfare, its customers, its farmer-suppliers of milk, or its employees and stockholders, without aggressive application of the results of research. The larger the company, the more responsibility it must accept, both in the development of research and in its application.

Since 1857, The Borden Company has been engaged in the processing and distribution of milk and the products of milk. The founder of the company, Gail Borden, invented and patented the first method of condensing milk in a vacuum. The resulting product which was more palatable and usable became an important factor in the diet of the nation.

One of the problems with which Gail Borden struggled was the quality of the supply from which the condensed milk was produced. Since his time, the company has continuously engaged in the improvement of the quality of the milk supply and in the maintenance of high standards of milk production.

0

Inasmuch as the health of cows is a most important factor in our efforts to improve the quality of milk, it is quite natural that the company should offer to establish one of its

research awards for administration by the American Veterinary Medical Association, to be given annually to the person who has made an outstanding achievement in research contributing to the control of dairy-cattle disease. The close relationship between the health of dairy cattle and the public health has long been recognized. Much has been accomplished in the development of a safer milk supply—achievements which can be recognized through these awards. But there is much which can yet be done.

At the present time, eight Borden awards are available. Each of them is provided for a specific field of activity relating to the production, processing or the utilization of milk and milk products. The awards are made for research which has been reported in public documents or scientific journals. Any benefits resulting from the research are available to everyone. Residents of Canada and the United States, except employees of the company, are eligible.

The American Chemical Society administers an award covering the chemistry of milk, the constituents of milk. The American Dairy Science Association administers one pertaining to dairy production and one pertaining to dairy manufacturing and processing. The American Home Economics Association bases its award on research in applied nutrition in dairy products. The American Institute of Nutrition presents one for research which has emphasized the nutritive significance of the components of milk or of dairy products. The American Academy of Pediatrics directs one for research related to infant nutrition; the Poultry Science Association, for contributions to poultry science advancement. All of these, of course, are for outstanding accomplishments in their respective fields.

The American Veterinary Medical Association has accepted the administration of an award for significant research contributing to the control of dairy-cattle disease. The Borden Company deems it a privilege to coöperate with your association in this phase of the improvement of the national milk supply, which, with its products, provides nearly one-fourth of the nation's food and an even larger proportion of the essential elements of nutrition.

Today, you are recognizing one who has achieved signal success in his contribution to veterinary science. As is true of the selection of all other recipients of these awards, today's recipient has been named by a committee from the administering association—men, from your own organization, who are best able to judge the qualities of workmanship in this field.

In reply (see "Proceedings" in this issue), Dr. Huddleson emphasized that his coworkers are also entitled to credit, that

such a token was preferable to a wreath on one's grave, and that it was acceptable as a challenge to step up future efforts. "May the future not find me unworthy," the modest Huddleson concluded.

HUMANE ACT AWARD

A not-to-be-forgotten event of this opening session was the presentation of the "Humane Act Award" (see "Proceedings" in this issue) to a Chicago youngster by



Dr. W. A. Young presenting the Humane Act Award to Frank Kiemele.

Dr. W. A. Young, director of The Anti-Cruelty Society, acting for the Association. The recipient was Frank Kiemele, founder, with his sister Sally, of *Pet News*, a paper devoted exclusively to kindness to animals, and started in memory of their pet dog "Rinty", who died of distemper after having been cruelly stolen from them when they were small children.

HONORARY MEMBERSHIP

Another honor conferred during the 81st annual meeting was the election of the Hon. Will J. Miller, Livestock Sanitary Commissioner of Kansas, to honorary membership in recognition of his distinguished services to veterinary science and the advancement

The invasion of France was a triumph in planning—just as your War Bonds are a triumph in financing the plan.

of its application. (see "Proceedings"— House of Representatives and General Sessions.)

THE PRESIDENT-ELECT

Dr. Bennet T. Simms, Director of the Regional Animal Disease Research Laboratory, U. S. Bureau of Animal Industry at Auburn, Ala. since 1938, was unanimously chosen president-elect at the eighty-first

annual meeting in Chicago in August. Born at Emelle, Ala., January 25, 1888, Dr. Simms received his early education in local schools and then attended Alabama Polytechnic Institute, where he was a student in Animal Husbandry for two and one-half years and from which he received his veterinary degree in 1911. He was also a special student at the University of Chicago in 1912-13 and 1916.

After graduating from Alabama Polytechnic Institute, Dr. Simms was, for two years, instructor at North Carolina State College. In 1913, he was appointed head of the Department of

Veterinary Medicine at Oregon State College and Experiment Station. During the twenty-four years in which he held this position, he made a distinguished record in administrative and research work. His published investigations have included bovine brucellosis, salmon poisoning in dogs, liver flukes in sheep, phenothiazine as an anthelmintic, goiter in foals, parasites of fish, Johne's disease, and lathyrus poisoning in cattle. The president-elect has been active in veterinary organization work for many years. He served the Oregon Veterinary Medical Association as secretary-treasurer for twenty-three years, 1915-1938; he was

a delegate for that association to the AVMA House of Representatives from 1934 to 1938; member of the Oregon State Board of Veterinary Examiners, 1936-1938. Joining the AVMA in 1912, he served continuously on the Committee on Education from 1919 to 1928 (chairman, 1923-24 and 1925-26); he was also at various times a member of the Committee on Resolutions and the Special Committee on Parasitology.

When the AVMA annual meeting was held in Portland in 1925, Dr. Simms was chairman of the Committee on Local Arrangements. He is presently veterinary member of the Corps Area Committee, P&A Service, for the Fourth Service Command.

Dr. Simms is a member of Beta Theta Pi, Alpha Psi, Alpha Zeta, Gamma Sigma Delta, Phi Zeta and Sigma Xi, and is a fellow of the American Association for the Advancement of Science. He married Miss Lillian LaLonde in 1922; they have two daughters and sons, both of whom are in the service.



President-Elect B. T. Simms

General Sessions

There were no section meetings at the Chicago meeting. All of the sessions were general. The symposium idea of presenting major subjects was renewed under the name of "panel."

The banquet, Dean W. A. Hagan, toast-master, the floor show, the president's reception and ball, combined to fill up a pleasant evening. The postprandial address of Madame Julia Marie S. Colbjornsen. Norwegian refugee and Red Cross nurse of Washington, D. C., will be remembered as an unusual distraction. Her address and portrait appear elsewhere in this issue.

Livestock in Wartime Norway

MME. JULIA MARIE S. COLBJORNSEN

Washington, D. C.

BEFORE I SPEAK of veterinary work and livestock in Norway may I be permitted to recall that veterinary science is as old as the domestication of animals. It was practiced in India, Assyria, Babylonia, and Egypt more than 4,000 years ago. The first historical evidence of veterinary science comes from Greece where, in 1400 B.C., human and veterinary medicine were practiced by the same functionaries. religion forbade the dissection of the human corpse, anatomy was studied on animal cadavers. Well-known practitioners of the veterinary art were the Greek shepherd, Melampus, about 1360 B.C.; and Chicon, 1350-1270, B. C. Among the first veterinary authors was Hippocrates (460-370 B.C.), not to forget Aristotle (384-322 B.C.), both of whom were known as doctors of man and animals. Among the Romans, veterinary medicine declined from the first century of the Christian era, yet the science showed life until the fall of the Roman Empire (500 A.D.). In Spain, Lucius Colamella, during the first century A.D., laid the foundation of an independent veterinary science and Apsyrtus, "the horse doctor" of Constantine the Great (4th century A.D.) wrote a treatise on the treatment of animals. Knowledge of animal medicine was gathered together by Publius Vegetius Renatus (450-510 A.D.) and his work was used in France, Germany, and Italy as late as the sixteenth century. One must not forget the Arabs who conserved knowledge of veterinary science through the Middle Ages, but the period up to 1560 A. D. was a stagnant one for veterinary science. The first sign of awakening came with the Italian, Carlo Ruinis, early in the seventeenth century. His

works, both human and veterinary, were not published until after his death. In Denmark, Thomas Bartholius (1616-1680) published a book on anatomy of livestock and livestock diseases. A new era of veterinary



Mme. Julia S. Colbjornsen

science started in the middle of the eighteenth century when the rising tide of agriculture increased the value of the soil, and the handling of plagues among cattle was not understood. This led to the founding of the first veterinary university at Lyon, France, in 1761 by Bourgelat (1718-1779). France, therefore, has the honor of developing veterinary science, which theretofore had been practiced by blacksmiths and butchers. After Lyon came other veterinary schools in other European countries. The University of Veterinary Science of Denmark was found in 1773. From this college the first Norwegian veterinarian,

Excerpt from an address made at the banquet of the 81st annual meeting of the American Veterinary Medical Association, held in Chicago Aug. 22-24, 1944.

Madame Colbjornsen is the wife of a former member of the Norwegian Parliament and present financial counsellor of the Norwegian Embassy in Washington. She and her husband escaped from the Nazis in Norway on skiis through Sweden and northern Russia, finally making their way to this country by way of Iraq, Africa, and South America.

Johan Retger, was graduated. Although the parliament of Norway appropriated \$1,000 for veterinary education, it was not until 1890 that the veterinary pathological laboratory (Veterinary Institute) with a professor in charge was established. 1918, it was decided to establish a veterinary university at Oslo, but it did not take form until 1933. The course is five and a half years and only graduates with high honors of the preparatory schools (artiums) are admitted and only in such numbers as they are needed. In Norway, therefore, we do not want a veterinary proletariat. Twelve to fourteen a year are sufficient, but the Veterinary Institute does a great deal of research work in animal husbandry. Some of the veterinarians are paid partly by the state and partly by the country. In the large cities, we have "police veteri-The civilian service is directed by a veterinarian employed by the Department of Agriculture. In 1892, a law was passed to provide meat inspection for cities of over 4,000 population, but now we have a meat-inspection service all over the country. A veterinary corps was established in the army in 1893. It is composed of a major and 18 paid and 81 not-paid veteriary officers. Later, veterinary associations were formed all over the country; the first one was founded in 1885.

CATTLE IN NORWAY

We have special local breeds of cattle, as the foreign stock we once imported did not thrive well in our country. They were easy prey for tuberculosis. The Ayrshire imported from Scotland about fifty years ago, had to be crossed with native cattle (the Tronderfe). Trondelag, in the north central part of Norway, is the cattle breeding center and market, owing to the lush hay crop there. The Tronderfe are red and excellent milk and meat producers. milk is 4 per cent butterfat. Another breed is the Rorosfe in the northern part of Oesterdalen, one of the Norwegian valleys. They are mountain cattle, the same as one finds in Jamtland, Sweden. They are small cows of 700 to 800 pounds but good milkers. Their milk averages 4.3 per cent butterfat. In the Gudbrands valley, one finds the Dolefe breed, or Valley cattle. These are descendents of the wild cattle of Europe, such as are found in the canton of Greebunden, Switzerland. They were brought to Norway after the last ice age,

about 5000 B. C. They are nearly black on the sides and light brown along the back. with white noses, and are producers of 4 per cent butterfat, and somewhat low in meat percentage. At my birthplace, the great agricultural district of Opland and Hedemark, around Norway's greatest lake. Mjosa, one finds the red and white Swedish breed, Boskap (part Ayrshire), producers of milk containing 4 per cent butterfat. In these large agricultural districts, there are also Red Polls which are typical producers of milk with a rather low content of but-The Telemark breed of southern terfat. Norway are also found there. They are a milk breed, exclusively-small and warlike. The bulls become dangerous, owing perhaps to the mountainous surroundings. Along the coastline of southern Norway are the Lyng Valley cattle, small Red Polls, good milkers but poor beef cattle. North of Stavanger, we have the Fjord breed, primitive, dual-purpose stock raised under the difficult conditions of mountainous terrain, and north of Trondelag, still smaller breeds of primitive stock, as far north as Troms and Finmark.

Norwegian cattle are healthy. Eradication of tuberculosis among them began in 1890, and at the present time that disease does not exist, thanks to ample appropriations for the work and the help of the veterinarians.

All milk, including skimmilk, is sterilized. On that account, the Norwegian people feel safe and consume more milk per capita than The milk industry is other countries. prosperous. It is concentrated in the hands of the farmers. The process of producing unsweetened condensed milk was developed by my father, Dr. Olav Sopp. He sold the right to the patent to Henry Nestlé in 1897. This industry did much in developing hygienic conditions in milk production on the farms, and the expense of marketing has been cut down to the minimum. In Oslo. the cost of marketing milk is 1 1/2 cents a quart compared with 5 to 6 cents per quart in Copenhagen. The farmers, with the cooperation of the doctors, succeeded in providing a pint of milk for every child. Now, the Norwegian soldiers are the tallest in Europe.

At the time of the German invasion, Bang's disease [bovine brucellosis], was nearly exterminated, thanks to the work of the veterinary society. Foot-and-mouth disease outbreaks occurred but twice in Norway. This disease was met with strong precautions. The infected districts were isolated and the sick were slaughtered and burned. During the German invasion, the disease broke out again outside of Oslo. The Germans brought it in-their animals are heavily infected. A great campaign had been waged against mastitis (jurbetendelse), but when the use of milking machines was started, the disease seems to have been more readily transmitted from one cow to another than by hand milking. Milking machines are now widely used in Norway owing to the shortage of help. Farms of but 8 to 10 cows use them. Anthrax is only sporadic and therefore not difficult to handle.

Hogs

The Norwegian Landrace is a large, long hog that produces much lean bacon. The Yorkshires are also raised but less popular because the people like lean bacon. Tuberculosis is rare in our hogs. All the milk fed to them is pasteurized. Hog cholera is rare and isolated. When found, the veterinarians kill the hogs and burn them. Red sickness [swine erysipelas] is controlled by vaccination.

SHEEP AND GOATS

We have our old Norwegian breed of sheep—short tails, and then we have the Dala (Swedish), as well as Cheviots, and Oxford Shiredowns. They are not troubled with contagious diseases and no one has ever reported tuberculosis among Norwegian goats. In the north, we have our nomadic Lapps, whose herds of reindeer do much damage when moved from one country to another to graze on farms. So, special arrangement is made between the countries to pay for the damage done.

CHICKENS

Our chickens are White Leghorns and Rhode Island Reds. Fifty per cent of our farmers' income is derived from milk, meat, and bacon but a considerable amount is provided from eggs and poultry.

FOXES AND MINK

The breeding of silver foxes is an important industry in Norway. It was started in 1913 by the importation of breeding stock from Canada. Its growth has been

fantastic. Before the war, Norway had become the biggest producer of these furbearing animals: silver foxes, platinum foxes, and blue foxes. It was a large and profitable trade, conducted by over 20,000 peasants all over the country; besides, it created a market for agricultural products (beef, horse meat, vegetables, whale meat, fish, and potatoes). In 1939, Norway exported about 400,000 silver fox pelts (30,000 to the United States) and also many valuable and gorgeous platinum fox furs, and mink. The marketing is well organized on a coöperative basis.

The Norway Silver Fox Breeding Association is the largest of its kind. It has 10,000 members, while the largest in America has but 1,200 members.

PRODUCTION DIMINISHED

Norwegian agriculture has been ruined to a considerable extent by the Germans and their Quisling helpers. Livestock production has suffered heavily; cattle have been reduced and their yield is poor because forage is insufficient and of poor quality. The plight of the population is sad because the Germans take away a large part of the diminished production. Had the Norwegian people not been convinced that the defeat of the Germans is near, the reduction would have been still greater. According to the sparse data available, the cattle have been reduced from 1,450,000 head in 1930 to 1.100,000 head in 1943. Milk cows decreased from 864,000 to 650,000. Milk production decreased to a million tons from its former 1 1/2 million tons; butter from 14.-000 tons to 8,000 tons. The number of hogs went down from 362,000 to 120,000; sheep from 1,780,000 (1939) to 1,650,000 (1943): goats from 294,000 to 216,000 during that period, and poultry from 3,500,000 to 1,500,-Egg production dropped from 2,000 tons to 7,000 tons, annually. Of our 204,-000 horses in 1939, the Germans took 14,000 of the best ones for their military and civilian use.

HORSES

I am most interested in horses. The domestication of horses took place before the dawn of history. One may read of horses in China and Babylonia 2,500 years B. C. The Fjord horse of Norway is a descendant from the Arabians. They are famous for strength and speed. Horses are found

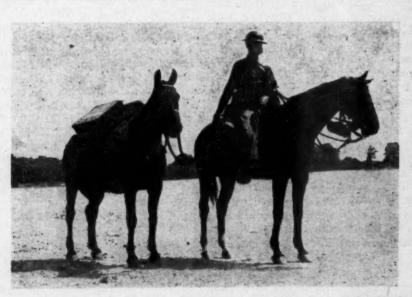
mostly on the West Coast and North. They are either grey or dun with a black stripe along the back, full of vitality and good climbers—useful for mountain troops. Another breed is the Gudbrands Valley horse. found all over Norway. It is a medium weight horse with good gaits. In the northern part, we have many Finnish horses. All Norwegian horses are noted for their strong legs and good hoofs. Even in cities, hoof diseases are rare. Horse breeding is sponsored by the state and is directed by breeding associations. The cavalry used both Norwegian and imported horses. Every farmer must keep one horse for military use and for keeping it they get an annual compensation. At 3 years of age, it is sent to the remount school for training of two years. The farmer is paid for keeping the horse and is compensated if it is not returned in good condition. The horse, must, however, be delivered to the state if needed for military service. During the German occupation, the Germans stole so many horses that they now sell for as much as \$1,000 a head.

The control of brucellosis must be based upon the good judgment of a good veterinarian and owner.—Successful Farming.

A Report on Human Inefficiency

Most assuredly, the greatest blunder of American agriculture is the failure of stockmen to seed the grasslands. "Seed, a necessity for the replacement of plants, was forgotten," says Professor V. E. Shelford of the University of Illinois in Science." Under the title of "Deciduous Forest Man and the Grassland Fauna", the author writes an extremely scholarly and quite complete analysis of the settlement and misuse of that stretch of land called the United States. In short, common sense deserted the settlers and never came back. The article is too long to abstract here. It should be read and studied widely to serve its purpose. Enough space must, however, be given to repeat the author's startling reminder that our Middlewest and Great Plains sustained more animals before it was settled by the white man than the present population is able to sustain now-75,000,000 buffaloes alone, not to mention millions of other fauna that lived and thrived there. Cause: the weather, the plow, overgrazing, erosion, and the natural stupidity of the master mammal.

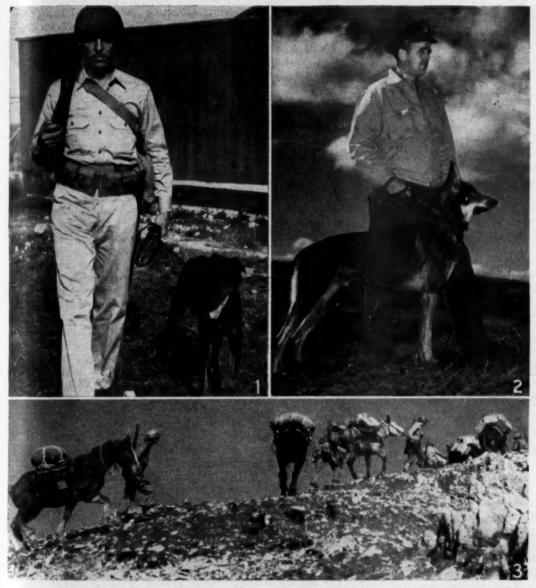
*Science, 100, (Aug. 18, 1944): 135-140.



-Signal Corps Photograph

Pack horses delivering Medical Corps supplies, somewhere not stated. The picture is reproduced from the Bulletin of the U. S. Army Medical Department of July, 1944.

Animals in the War



-Signal Corps Photos

- 1. Pvt. Keith R. Stewart, Ramona, S. D., an armed sentry-dog trainer with a Doberman Pinscher of the K9 Corps. Many dogs of this unit have been assigned to advanced duty.
- 2. Lt. John E. Daniels, of a North Atlantic base, with a German Shapherd guard dog under training.
- 3. Home on the range in Italy.—When mechanized equipment bogs down in heavy mud or mountain terrain, horses and mules are a valuable cog of the military machine. The American forces in Italy use large numbers of such animals where sureness of transportation is essential to their successful operation. The picture was taken at Calla, Italy, Nov. 14, 1943.

Adult Vaccination Against Brucellosis in Cattle

Brucellosis (Bang's disease-infectious abortion) remains one of the major hazards to the livestock industry in the United States. It causes large financial losses in infected herds and constitutes a threat of the first magnitude for every herd of brucella-free cattle and swine in the country. In addition, brucellosis, under the name of Malta fever or undulant fever, constitutes a public health problem; the extent and importance of which is not generally appreciated. That it is a serious hazard to the health of individuals and communities has been shown by Jordan,1 Harris2 and others.

These facts and the absence of any simple, effective means of controlling the disease have led to the over-enthusiastic reception by cattle owners of any scheme which appeared to offer some promise for control before it was subjected to critical experimental tests. Unfortunately, it also has made possible the exploitation of many herd owners by unscrupulous interests through the sale of so-called cures.

CONTROL PROCEDURES FOR BRUCELLOSIS Now IN USE

The procedures now generally accepted by the veterinary profession as most valuable for the control of brucellosis are:

- 1) Test and immediate elimination of reactors.
- 2) Test and immediate elimination of reactors, together with calfhood vaccina-
- 3) Test and gradual elimination of reacting animals, together with calfhood vaccination.

In many states indemnities are paid when plans 1 and 2 are used, as a means of minimizing financial losses to the herd owner. In all cases, the plan used should be accompanied by intelligent herd management to minimize spread of the infection.

A combination of these methods may be the most effective means for control in the opinion of Birch.3 His experienced judgment on this question is ably set forth in the following quotation:

cause our tendency has been to rush from one method to another, attempt to apply each method to all herds in all circumstances, then to commend or condemn. retain, or abandon, according to our indi-vidual experiences. These experiences have depended in turn, not chiefly on the potentialities of the method itself, for each is useful in its place, but on the circumstances under which it has been used. We have not yet attained the flexibility which enables us to suit the method to the conditions in the individual herd, though in the setting up of the plan involving test and hold with vaccination of the calves as indicated, a step has been made more important, perhaps, than is yet fully realized."

"I place emphasis on the combination be-

Under the program to control and eradicate brucellosis in cattle by test and slaughter, much progress has been made. On Oct. 1, 1943, approximately 2,200,000 herds, containing about 16,800,000 cattle. were under supervision (Donham et al.4). About 846,000 cattle, located in 40,500 herds in 41 states, are fully accredited brucellesis-The farmers in 717 of the 3,071 counties of the United States have chosen the area plan of control for brucellosis in cattle; this represents over 23 per cent of

the counties.

In December 1940, calfhood vaccination with strain 19 was approved as a part of the official control program for brucellosis in cattle. About 442,000 calves have been vaccinated under official supervision since Jan. 1, 1941. Calfhood vaccination can be considered as an important advance in the overall program for eradication of this disease, but not as a substitute for other methods of control. The best experimental evidence indicates that it must be supplemented by other methods if the disease is to be effectively handled.

The most recent proposal is the use of strain 19 for the vaccination of mature cattle and calves over 8 months of age. In some states, this method is now being employed under official state supervision in certain types of infected herds. However, adult vaccination with strain 19 is being used by veterinarians and laymen alike in many herds that are not under official supervision, and in some cases, under circumstances which can lead only to un-

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fortunate results for the herd owner and possibly for public health.

THE VACCINATION OF ADULT CATTLE WITH STRAIN 19

Since Cotton, Buck, and Smith⁵ reported that vaccination of calves aged 4 to 8 months with strain 19 of Brucella abortus offered a promising means of producing a state of resistance to subsequent infection with more virulent strains of this organism, numerous investigators have confirmed their observation (see Huddleson⁵). While resistance thus established is not sufficient to protect against later exposure to virulent strains of Brucella under all conditions, it is serviceable and calfhood vaccination. when used in connection with other methods of control, is now officially recognized as a valuable tool in the control of this disease. (Donham et al.4).

The success attained with calfhood vaccination has stimulated a demand by cattle owners, especially those who are experiencing heavy losses from brucellosis, for vaccination of mature cattle in such herds. Unfortunately, there is relatively little critical information on the vaccination of adult cattle, and calves over 8 months of age, with strain 19. While such evidence as is available would indicate that adult vaccination may have a place in control of brucellosis under certain conditions, much more information is needed before widespread use of adult vaccination can be recommended.

Haring and Traum⁷ report that beneficial results have been obtained in eliminating brucellosis by use of strain 19 vaccine on adult cattle in certain experimental herds in California. When vaccination with strain 19 was begun in 1933 in the San Quentin prison herd: 17 unbred heifers between 12 and 32 months of age were vaccinated. Though badly infected at that time, this herd was apparently free of Brucella infection in 1941. If vaccination had been limited to calves between 4 and 8 months of age and the older, susceptible heifers left unvaccinated, the authors are convinced that eradication of the disease would have been delayed; and that under the circumstances, the project might have been a complete failure.

From clinical observations in infected herds, Lothe⁸ states that vaccination of sexually mature, Brucella-negative cattle is a useful tool in controlling this disease under certain conditions. In his judgment, adult vaccination should be used only in herds, where infection is active, as a means of hastening the process of building up herd immunity to the point where the disease can be eliminated from the herd.

Where sexually mature cattle are vaccinated, the owner must be prepared to accept certain disadvantages and losses. Cattle vaccinated as adults remain positive to the blood test over relatively long intervals, and a considerable percentage fail to return to a negative status. Since legal restrictions bar the movement of cattle while they remain positive, the owner must be prepared to face this hazard if he resorts to adult vaccination. Another handicap to adult vaccination is that some health regulations permit only milk from brucellosisfree herds to come into the market.

PUBLIC HEALTH ASPECTS OF ADULT VACCINATION

While it seems well established (Rabstein and Welsh,⁹ and others) that vaccination of calves under 9 months of age does not result in the establishment of the Brucella organism in the udder, such information has not been clearly established for animals vaccinated as adults. While the meager, circumstantial evidence available would indicate that strain 19 is of low virulence for the human, adequate safeguards against the possibility of infection with this organism should be provided until such time as it is definitely established that strain 19 is not dangerous for man.

A greater hazard to human health from the use of strain 19 in the vaccination of adult cattle lies in the fact that cattle so vaccinated remain positive for long periods, a large percentage even permanently. Since the agglutination test is inadequate in differentiating between infection resulting from strain 19 and infection from more virulent strains of Brucella, cattle infected with more virulent strains may be retained in herds where adult vaccination is practiced. The milk from such cattle may constitute a real hazard to human health. Consequently, where adult vaccination is employed, provision should be made for careful pasteurization of milk from such herds. Cattle vaccinated as adults should be permanently identified and managed in the same manner as cattle showing positive reactions to the agglutination blood test

for brucellosis and in accordance with state and federal regulations.

RECOMMENDATIONS CONCERNING ADULT VACCINATION

The ultimate goal of the livestock industry should be the elimination of brucellosis from the animal population. To accomplish this, the industry must make judicious use of the best methods of control now known, imperfect as they are, and support a vigorous research program aimed at the development of more effective ones. The intelligent use of strain 19 vaccine should contribute materially to this end.

On the basis of existing knowledge, which is far from adequate, the Committee offers the following recommendations:

- 1) In "problem herds" in which it has been impossible to eliminate brucellosis by the test and slaughter method, it is suggested that all calves and Brucella-negative, nonpregnant animals be vaccinated. The vaccination of the mature cattle should be used only as a means of elimination of the disease from the herd and not as a permanent program. Such vaccination should be under the supervision of a qualified veterinarian and in accordance with the program in effect in the state. Such cattle should be handled as reactors in accordance with state and federal regulations.
- 2) In herds where there is rapidly spreading, active infection with a high percentage of reactors that are being retained and in which calfhood vaccination is being practiced, the question of vaccination of negative adult nonpregnant animals should be left to the wisdom of the veterinarian. The procedure to be followed in such cases should be governed by the conditions existing in that locality, and in accordance with state laws.
- 3) The use of strain 19 in adult cattle should be discouraged in brucellosis-free herds, and particularly in herds where an attempt is made to keep the herd free from animals that react positively to the blood serum agglutination test. In the light of existing information, the vaccination of adult animals should not be practiced in herds in brucellosis-free accredited areas, in modified accredited areas, or in areas in the process of being accredited.
- 4) The committee commends the U. S. Bureau of Animal Industry for the supervision that it is giving to the production of

strain 19 vaccine and recommends that this supervision be continued.

5) In view of the perishable nature of strain 19 vaccine and the public health aspects of brucellosis, it is recommended that ways and means be developed to establish supervision over this product during its storage, distribution, and use. This should include careful supervision during transportation of the product. The aim of such supervision should be to insure a satisfactory standard of viability of the vaccine at the time of its use, and also to prevent undue exposure to the organism by those who are not acquainted with the possible hazards it presents to human health.

In making these recommendations, the Committee wishes to emphasize that adult vaccination should be considered only as an expedient to tide over difficult situations in particular herds, especially in times when it is essential to maintain production of milk and meat. According to such published and unpublished data as are available, the use of adult vaccination may bring about decreased incidence of brucellosis in heavily infected problem herds. In such herds, it should be used but once-and then should be followed by a program of calfhood vaccination. This plan should permit owners of heavily infected herds to work toward a brucellosis-free status with minimum financial sacrifice.

RESEARCH MUST POINT WAY TO BETTER CONTROL METHODS

Research must point the way to new and more effective methods of control, and the Committee emphasizes the great need for an enlarged research program on brucellosis. We have every confidence that from such research will emerge facts that will lead to the development of more effective means of control than those now available The magnitude of the problem, its importance to the livestock industry, and the public health aspects of brucellosis make such a program imperative. The expenditure of relatively small sums for research today may mean the saving of millions of dollars to the industry tomorrow and the removal of a public health hazard; the importance of which the public is not yet fully cognizant.

The Committee recognizes that strain 19 vaccine, in its present state of preparation, is not an ideal immunizing agent and that the livestock industry would be greatly benefited if an immunizing agent were de-

veloped that would produce a more solid and lasting immunity and without producing a positive agglutination reaction. Research in the following fields among others, is recommended:

1) Continuation of present studies, and initiation of new ones, designed toward the development of agents, including nonliving ones, that will produce a more solid and lasting immunity than that resulting from strain 19; and which will be effective for cattle, swine and other species.

2) Determination of the optimum conditions for maintaining the viability of strain 19 vaccine, or improved immunizing strains that may be developed.

3) An investigation of methods which will maintain the highest immunogenic properties of any strains used for immunizing purposes, including strain 19. Also an investigation of methods for the utilization of vaccines.

4) The initiation of research projects in private herds under farm conditions where state and federal veterinarians are cooperating in the control of bovine brucellosis. These projects should be under the complete supervision and control of research personnel of the previously mentioned agencies, or other designated research agencies. To maintain complete supervision and control in such herds, sufficient funds to take care of the necessary expenses should be provided. Such projects should include studies on: (a) brucellosis-free herds; (b) herds where infection has just entered; (c) herds in which brucellosis is well established; and (d) herds cooperating in official federalstate programs for calfhood vaccination, but in which reactors are retained.

5) The greater development of research on brucellosis of swine, especially as it relates to brucellosis in cattle and to the public health.

6) The collection and compilation of more complete information on the public health aspects of brucellosis.

A campaign for the education of the public to the importance of the brucellosis problem should go hand in hand with the steps set forth in the previous recommendations. An enlightened public will be more sympathetic to the application of necessary methods of control, and will be more willing to support a constructive program of research and control. The veterinary profession and livestock associations should

encourage and stimulate this program to the fullest extent. Solution of this problem will require the fullest coöperation between veterinarians, herd owners, organized representatives of the cattle industry, and public health officials.

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SUBCOMMITTEE ON BRUCELLOSIS

s/ W. V. Lambert, Chairman

W. L. Boyd I. Forrest Huddleson C. M. Haring Herbert Lothe

A New Profession in the Making?

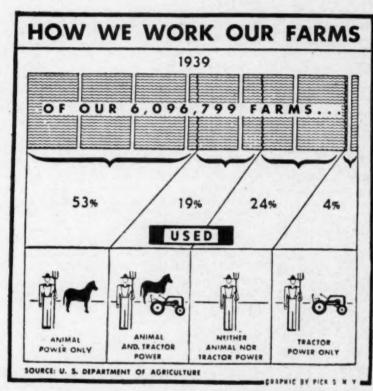
Thinks Kennel Gazette (Mary W. Crane speaking): "I began to think in terms of America's need for schools for specific jobs in the kennel and canine nursing fields that will be offering a luring call to them [girls] in the world of the future . . .," going on to recommend that agricultural colleges and finishing schools encourage technical and practical courses required to establish this new profession. The author goes opining that veterinary hospitals would be glad to coöperate in giving courses on the medical and surgical side, and kennel owners could be found to give the girls actual field work experience. What do you think?

The spring pig crop of 1944 was 24 per cent below that of 1943, and the fall crop, says a recent report, will be 34 per cent lower than 1943's. No reasons are given for this amazing drop.

The Marvels of American Farms

THE FARMERS of the United States are breaking production records that are heard and felt in the four corners of the world, even to the point of over-producing, and ground to the animal and no-animal col-

For the ten-year period, 1933 through 1942 the average livestock holding (cattle,



Illustrating the role of the agricultural soliped in human affairs—of the hay burners as the wisecrackers call them even as they produce their "chow," bring up the ordnance, and "pass the ammunition."

-From the Chicago Sun

strangely, in the popular mind, all of the credit goes to the gas-pulled machinery, notwithstanding that 77 per cent of American farms, as the chart shows, are as tractorless as a skating rink. The horse-tractor situation, broken down in the following chart, is portrayed- from figures supplied by the United States Department of Agriculture, as of the year 1939. Although a survey for 1944 would no doubt change the percentages shown in the four columns, there is no certainty which way the columns would have changed on account of the war. Most assuredly, were the sizable war gardens and poultry projects included in the survey, the tractor column would lose

hogs, sheep, fowl, et al.) was 132 million head. For 1943 the number was 171 million head.

The purpose of this piece is to retrieve confidence in the agricultural horse and mule which we ourselves may have lost through the continuous flow of misleading information on the make up of the nation's food-producing mechanism. On another page is a hint on what the horse and mule are doing on the battle fronts while the gas-pulled blitz gets all the credit. Let us not mislead ourselves nor others in a matter so fundamental to the country's weal. The veterinarian, to stay on the job, has to stay pragmatic.

Listerellosis Occurring in Wisconsin

G. R. SPENCER, D.V.M., M.S., H. H. HOYT, D.V.M., and C. K. WHITEHAIR, D.V.M., M.S. Madison, Wisconsin

LISTERELLOSIS or listeriosis of sheep has been reported in several midwestern states. and the technical aspects of the disease are discussed in a bulletin from Illinois.1 The first record of occurrence in three flocks in Wisconsin seems worth reporting.

Flock 1.-A group of about 250 mature sheep belonging to a large institution was proved affected with listerellosis in January 1942. The first record of death with cerebral symptoms was of a ewe which had been brought from Illinois. This ewe died on Aug. 10, 1941, about one month after she had been purchased. The second record of sickness with similar symptoms was in January and February 1942, when 3 sheep died following symptoms of dullness, circling, and paralysis. The 1 sheep, examined post mortem, showed hyperemia of the meninges, and Listerella monocytogenes was recovered from the brain.

Eight deaths occurred during 1943, all following symptoms of dullness, hemiplegia, and general paralysis. Listerella was recovered from the brain of the single sheep,

post mortem.

Another outbreak occurred in March 1944, and the first case was investigated more fully as follows: A yearling nonpregnant ewe was unable to rise. Other symptoms observed were a right lateral deviation of the head, profuse nasal discharge of a greyish to clear mucus, and dull consciousness. Seven Gm. of sulfanilamide were administered per os. The next day, the ewe was moribund with a respiratory rate of 125 per minute and a pulse rate of 165. Death occurred on the second day after symptoms were first noticed. The postmortem examination disclosed congestion of the meninges of the brain and the spinal cord, and a severe rhinitis. A greyish discoloration about 6 mm. in diameter was observed on the left cornea. L. monocytogenes was recovered from cultures of

the cerebrum, cerebellum, and the medulla oblongata. Sections of tissue taken from the brain, liver, and spleen were fixed, sectioned, and examined microscopically. The brain lesions were characterized by: (1) leptomeningitis with congestion and infiltration of lymphocytes and monocytes, and (2) early encephalitis involving the medulla oblongata as evidenced by perivascular infiltration of lymphocytes and monocytes, foci of polymorphonuclear infiltration independent of the blood vessels, and degeneration of a few neurons.

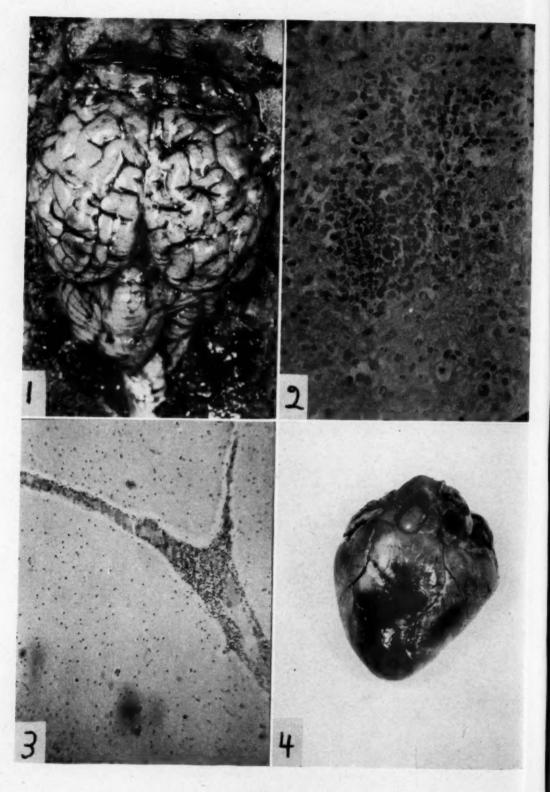
In the four weeks following the death of the previously mentioned animal, 4 more sheep became sick with similar symptoms. No treatment was administered, and all died. Postmortem examination disclosed the same general changes but in addition 1 ewe had recent, subepicardial, ecchymotic hemorrhages; and another which was pregnant had a slight fatty degeneration of the liver. L. monocytogenes was recovered from the brains of 3 animals; the other was not cultured.

To determine the approximate population of Listerella in each of the three parts of the brain, 1-Gm. pieces of tissue from a diseased animal were ground in sterile mortars and plated in dilution. The medulla oblongata contained 2,000,000 Listerella per Gm. of tissue while the cerebrum and cerebellum had only 80 and 120 organisms, respectively. A further indication of this concentration of organisms in the medulla was obtained in the other cases by the streaking method; many more colonies appeared on plates streaked with the medulla than with the cerebrum or cerebellum.

Flock 2.-In this group of 160 sheep, 4 died during December 1943. The owner reported that the sick animals circled to the right or left and died in a very few days. The fifth case, presented for diagnosis on January 5, had died the previous night. On postmortem examination the most significant change was a slight congestion of the meninges, but microscopic examination disclosed leptomeningitis and an early encephalitis involving the medulla. L. monocytogenes was isolated from the cerebellum.

Published with the approval of the research director of the Wisconsin Agricultural Experiment Station.

Graham, R., Levine, N. D., and Morrill, C. C.: Listerellosis in Domestic Animals. Ullinois Agric. Exper. Sta. Bull. 499. University of



(196)

On January 8, a sixth case was presented, and Listerella was recovered.

Flock 3.—Three sheep in a group of about 175 adult animals had died within one week with symptoms of circling, drooping of one ear, and often dilation of a pupil. The owner reported having lost 5 sheep the previous winter (1942-43) from a similar disease while 1 animal had recovered. The fourth case of the 1943-44 outbreak was a ram presented alive in a moribund condition. Postmortem examination disclosed a few ecchymotic hemorrhages in the subepicardium, two small areas of red hepatization in the lungs, and hyperemia of the meninges. Microscopically, leptomeningitis and encephalitis involving the medulla were observed. Cultures from the heart, liver, spleen, and kidneys showed no growth, but L. monocytogenes was isolated from the cerebrum.

CHARACTERISTICS OF THE ORGANISM

Ten strains of Listerella isolated from 5 animals in 3 herds could not be distinguished from each other by morphologic or biochemical means. The organisms were small, gram-positive, motile, and rodshaped. Their length varied considerably, and occasionally three or four were attached to form a short chain. They grew in ordinary bacteriologic mediums at room temperature, but showed faster growth at 37 C. On veal-infusion blood agar, the colonies were circular, smooth, entire, flat, viscid, and greyish white with a narrow zone of clear hemolysis. The strains formed neither hydrogen sulfide nor indol but reduced litmus milk rapidly with the formation of slight acid. Fermentation with the formation of acid-but with no gas-occurred rapidly in broth containing 1 per cent dextrose, levulose, rhamnose, maltose, and salicin. Slow fermentation of lactose, sucrose, and aesculin was observed. No fermentation of arabinose, dulcitol, galactose, inulin, mannitol, xylose, glycerol, or sorbitol

occurred within ten days at 37 C. These reactions indicated that the organisms were L. monocytogenes.

Strains isolated from flocks 2 and 3 were compared with a stock strain of *L. monocytogenes* by R. A. Packer, assistant professor of veterinary hygiene, Iowa State College, and he reported a close resemblance.

DISCUSSION

The principal signs of listerellosis, as we observed them, were slowness, dullness, impaired vision, circling, and a nasal discharge of clear to greyish mucus. Other signs sometimes observed were stiffness of the neck, drooping of an ear, lateral deviation of the neck, opacities of the cornea, and dilation of one pupil. Prostration and treading movements occurred before death. The only constant gross postmortem lesion was a slight hyperemia of the meninges of the brain. To establish an initial diagnosis in a herd, an affected animal or its head should be sent to a diagnostic laboratory for recovery of the causative organism.

The spread of the disease was slow in the 3 herds described. Recurrence during the winter or early spring during cold weather and when the animals were on dry feed seemed characteristic. The ration in flock 1 seemed adequate in most respects except for a deficiency of vitamin A or carotene.

In the differential diagnosis of ovine listerellosis, pregnancy disease must be considered when the affected animal is in the later stages of pregnancy. In doubtful cases, the lesion of fatty degeneration of the liver and the absence of encephalitis or meningitis would indicate pregnancy disease.

SUMMARY

Outbreaks of listerellosis in three Wisconsin flocks of sheep are described. The symptoms, postmortem gross and microscopic tissue changes, and bacteriologic findings are reported.

LEGENDS FOR ILLUSTRATIONS ON OPPOSITE PAGE

Fig. 1-Brain showing hyperemia of the meninges.

Fig. 2—Medulla oblongata showing a focus of polymorphonuclear infiltration. x 450. Hematoxylin and eosin.

Fig. 3—A fissure in the cerebellum showing hyperemia and infiltration of lymphocytes and monocytes in the pia mater. x 90. Hematoxylin and eosin.

Fig. 4—Heart with recent subeplicardial hemorrhage. This lesion was found in only 2 of the 10 cases post mortem, so it may not be specific

The Practical Side of Rabies

JAMES E. ASSING, D.V.S.

New York City

RABIES, one of the oldest diseases known to medical science, up to a few years ago was not well understood. Many medical men did not believe there was such a disease, but thanks to Pasteur and others, there are few physicians now who question its exist-Until he discovered preventive inoculations, many persons bitten by a rabid dog, who were not immune, died. Therefore, July 6, 1885, marked a great step forward in medical science, when Pasteur inoculated Joseph Meister, a 9-year-old boy who had received no less than 14 bites from a rabid dog, and whose life was saved. Thus, the great principle of vaccination first conceived by Jenner in 1796, was strengthened.

Every case of rabies is derived from a preëxisting case of rabies. It is caused by a filterable virus in the saliva, injected into the body through the bite of a rabid animal. The period of incubation is from two weeks to six months or more. The disease develops slowly; all domestic animals and man are susceptible. I have seen rabies in dogs, horses, cats, and man, but it is primarily a disease of the dog.

DUMB RABIES

The dumb form is characterized by paralysis of the lower jaw, inability to swallow food or water, change in voice and facial expression-and may or may not be vicious, depending on whether the virus is in the cerebrum or medulla oblongata. Death comes in about three days. All dogs with paralysis of the lower jaw are not rabid, but every dog with a dropped jaw should be considered a suspicious case until proved otherwise. These nonrabid cases are frequent. Obviously, they are due in most cases to a toxic condition originating in the intestinal tract, or due to injury to the lower jaw. After seven days, it is safe to treat these cases. If they die, no Negri

bodies are found. No doubt, many of these cases have been recorded as rabid and counted as clinical cases where Negri bodies were absent. Rabid dogs do not have convulsions unless the case is complicated with distemper.

INCIDENCE INCREASED IN NEW YORK CITY

Shortly after my appointment to the Department of Health (March, 1910), the dog-bite situation became more and more serious in New York City. The number of persons bitten increased steadily. As the number of rabid dogs was alarming, the following rules and regulations for the protection of persons bitten were adopted:

1) If a dog that has bitten a person is in perfect health seven days after the bite, there is no danger of contracting rabies.

2) If a dog that has bitten a person is not in perfect health, but is alive ten days from the onset of the disease, the dog is not rabid, but shall be held for further observation.

3) Every dog that dies after biting a person must have a postmortem examination of the brain to determine whether Negri bodies are present, and whether the cause of death is accident or disease if the bite occurred three weeks or less previous to death of the dog. (In actual practice, we send for the brain examination of every dog that dies while under observation for rabies, irrespective of the date of the bite.)

4) All persons bitten by stray dogs are advised to take the Pasteur treatment and all wounds caused by dog bites should be cauterized with fuming nitric acid as soon as possible.

5) All dogs that have bitten a personshall be brought to the shelter of the A.S.P.C.A. as soon as possible and held for observation by a department of health vet-

erinarian for at least seven days.

These rules have stood the test of over thirty years—not a case of human rabies has occurred after this procedure has been carried out. At the present time, there are over 10,000 persons bitten by dogs in the Borough of Manhattan alone every year and over 25,000 in New York City.

Abridgement of a paper read before the Veterinary Medical Society of New York City, December 2, 1942.

The author, retired on pension by the Health Department of New York City, was in charge of "dog bites" in the Borough of Manhattan for thirty years.

Some veterinarians claim that dogs they have had under observation showed symptoms of rabies for fifteen or twenty days and then died, showing Negri bodies on brain examination. My answer is that the case was complicated with some other disease, very often distemper, and that the real symptoms of rabies were not present until about four or five days before death. Rabid dogs do not have convulsions as a rule, but I have seen a few dogs that did have convulsions because the disease was complicated with distemper.

NOT EASY TO DIAGNOSE, CLINICALLY

When we meet a clinical case of rabies in a dog with all the symptoms present, it is one of the easiest diseases to diagnose, but unfortunately, all the cases are not clinically recognizable. To illustrate: A dog is brought to the shelter by an owner. Having bitten his boy, he wants to know if there is any danger to the boy. The dog's mouth is partly open. There is a partial paralysis of the lower jaw but there is no other symptom of rabies. The dog is not vicious—facial expression is good. There is no history of having been bitten by another dog. The dog can't bark to help in the diagnosis. The conclusion is that this is not a case of rabies but probably a toxemia. Yet, in view of the responsibility antirabic treatment is recommended. After seven days, if the dog shows improvement, the injections are discontinued.

Another case is that of the dog that has bitten its owner: The dog was goodnatured until a few days before, but was vicious. The owner tried to pet him and was bitten. A careful examination did not reveal any symptoms of rabies except viciousness. If the person bitten is worried or his physician wants to know if the dog is rabid, it is well to advise seven antirabic injections, and if after seven days the dog is in the same condition, treatment can be discontinued—the person bitten has been protected. On the first examination, one cannot tell the symptoms each succeeding day may bring forth. Therefore, if there are positive symptoms of rabies on the fourth or fifth day, valuable time has not been lost. In both males and females, libido may account for the change in disposition. On the other hand, when a perfeetly normal dog bites a person and the physician in the case recommends antirabic

injections, if sure of your diagnosis, it is well to take a firm stand. At best, rabies treatments are not pleasant to take. The veterinarian stands between rabies, on one side and unnecessary injections on the other.

"Can a dog have rabies and show no evidence of it?" "Yes," but the dog must die. Several years ago a man who had brought in a Poodle to be destroyed incidentally remarked, after the dog was in the gas tank, that the dog had bitten his wife. The attendant pulled the dog out of the tank alive but unconscious. He was revived and taken to the Health Department section for observation. He developed rabies and on the evening of the third day, he was found dead in the cage. Negri bodies were present in the brain. The person bitten was given preventive inoculations.

NEGRI BODIES

Professor Negri of Pavia, Italy, discovered these bodies in 1903. They were also discovered at the same time by Dr. Anna W. Williams, working under Dr. William H. Park of the Research Laboratories of the Department of Health, New York City. but Professor Negri made his report first and thereby received the credit for their discovery. What they really are or what rôle they play is still undecided. Some authorities and Negri once claimed they are Protozoa, and the causative factor in the transmission of rabies, while others claim they are but cell degenerations. Emulsion of spinal cord with no Negri bodies present can and does transmit rabies. However, the discovery has been a great help in the rapid diagnosis of rabies as with rare exceptions they are always present in clinical cases in animals and man that die of rabies. Before their discovery, one had to depend on the presence or absence of foreign bodies in the stomach, rags, straw, cinders, etc.

WHEN IS SALIVA VIRULENT?

When does the virus of rabies appear in the saliva? We have no laboratory tests nor other scientific data to confirm an opinion. I endorse the view that there is no virus in the saliva until about three days before clinical symptoms appear. Our seven-day period of observation covers this point.

In all cases of dog bites, where the per-

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son bitten insists on taking preventive inoculations, it is good policy to comply, as very often fear of rabies will cause the nervous breakdown.

RABIES IN HORSES

In the early stage, that is the first two or three hours, it is difficult to diagnose in horses. The horse first becomes uneasy and If in stable, he rubs himself against the stall. The owner usually suspects colic and tries to administer medicine. In a few hours, the maniacal symptoms set There is now no doubt about the disease, because he has become a vicious beast, biting and kicking at animals or men. Some rabid horses attack only horses and pay no attention to man, but in the last stage, they all bite and tear their breasts and forelegs or any other part they can reach. Paralysis sets in about sixteen hours after the first symptoms appear and the horse dies in less than twenty-four hours.

Over thirty years ago, a large dog, on his way down First Avenue, bit six horses traveling northward on the avenue. At 34th street a policeman shot the dog. The carcass was sent to the research laboratories where a diagnosis of positive rabies was made. I visited each horse bitten twice a week. All had been bitten on the nose. The wounds were insignificant. On the eighteenth day after the bite, I noticed one of these horses put his ears back at the sound of hoof beats on the pavement-always a sign of ill temper in a horse. I decided then to ask the owner how his horse was. He replied that the horse did not eat anything that morning. In a few minutes, an ice wagon with a team of horses came rumbling along, and as the team passed, this horse lunged out and bit the nearest horse furiously. After that episode he seemed like a normal horse. The horse was not furious to the owner but was dead the next morning, death taking place less than twenty-four hours after onset of the symptoms. His breast and forelegs were a mass of blood and torn flesh. The horse literally had torn himself to pieces during the night.

All the other five horses died from rabies or had to be killed.

RABIES IN MAN

Rabies in man is a sad sight; there is headache, nervous depression, sore throat,

quickly followed by paralysis of the throat, delirium, muscular spasms, and in the last stage, movements of the jaw that resemble biting, great exhaustion, and death in two to five days. The diagnostic symptom is inability to swallow food or water.

There is much work to do in public health education on this dreadful disease. There were 100 persons bitten by rabid dogs in the Borough of Brooklyn in 1940 and all except one person received antirabic injections, with the result that not one who received injections came down with rabies. One who would not submit to antirabic injections died. This certainly proves the efficacy of preventive inoculation.

Regarding observations that some wild animal carriers of rabies virus can transmit the disease to other animals and man but live on indefinitely themselves, I have no knowledge of any such animal from my own personal experience but will say that every dog or other domestic animal whose bite can transmit rabies dies of rabies.

Modern Treatment of Pneumonia

Bacterial pneumonia should be treated with sulfonamide drugs but since virus pneumonia cases are not benefited, they should not be exposed to the inevitable toxic reaction of sulfa drugs. Sulfathiazine, because of its low toxicity and wide range of effectiveness against respiratory infections. is the drug of choice. Sulfathiazole is more toxic and should be used only when sulfathiazine is not available. The initial dose (human) should be 2 to 5 Gm. followed with 1-Gm. doses every four hours. Some physicians advise an initial 5-Gm. dose intravenously or subcutaneously in severe cases. The drug should be discontinued at the earliest moment compatible with safety. -Therapeutic Notes. (P. D. & C.) January, 1944, pp. 24-26.

The membership of the AVMA is approaching 9,000—a sign that the veterinary profession is lining up for a march on Utopia.

More than 25 million migratory waterfowl used the refuges of the Fish and Wildlife Service during their southward journey of 1943. Mallards and pintails were the most numerous.

SURGERY & OBSTETRICS

AND PROBLEMS OF BREEDING

Protein Balance in Surgery

VICTOR CARABBA, M.D., F.A.C.S .- D.S.

New York, N. Y.

THE ADMINISTRATION of fluids is one of the most important therapeutic aids in surgery and is frequently a life-saving procedure; the surgeon, however, must realize that not only must the correct quantity of fluid be provided but also that the fluid be of the appropriate kind. In health, thirst and hunger ordinarily suffice to insure an adequate intake of fluid and nourishment. In the sick individual and in animals, particularly the surgical patient, such subjective sensations are usually depressed; as a result an inadequate amount of food and drink is ingested. Worse than this, many patients become depleted, i.e., they present a deficiency in one or more of the essential components of the body fluids. These components comprise in general the six nutritional elements: water, electrolyte (mineral), carbohydrate, protein, fat, vitamins. All but one (fat) may be considered essential for maintenance. Of the various deficiencies or combinations thereof, many are associated with serve clinical manifestations and may even lead to death. Surgeons now realize that replacement of such deficient fluids or food elements is essential if the patient is to recover, especially if he requires an operation which in itself increases the body needs for fluid and food. Provocative discussions of this aspect of surgical therapy form the subject of papers by Holman and Ravdin. The problem confronting the surgeon is really a biochemical one, but is easily solved by administration of fluid provided it is the right kind and is given in adequate amounts so as to restore the blood and body tissues toward normal.

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Protein nourishment is the most recent addition to parenteral fluid administration;

its importance emerges from the increasing realization that protein deficiencies are prevalent in surgical patients and that their correction is extremely necessary. Much of this newer knowledge is based on extensive observations showing that a fall in plasma protein concentration (hypoproteinemia) is of frequent occurrence. While hypoproteinemia may be due to actual loss as in hemorrhage and burns, or to deficient formation as in liver disease, many cases are due to an insufficient protein intake or to excessive tissue protein destruction, or to both. Such hypoproteinemia is often great enough to lead to nutritional edema, i.e., edema which is not cardiac or nephritic, but which follows the lowered colloidal osmotic pressure of the plasma resulting from a sufficient fall in the level of plasma protein. Nutritional edema is apt to follow a drop in the serum protein below 5 Gm. per cent, particularly when the albumin fraction falls below 2 Gm. per cent. Nutritional edema is of particular importance to the surgeon, not only because its presence delays healing, but also because this edema may be present in the mucosa of the intestinal tract, producing symptoms of obstruction at gastrointestinal anastomoses. The injection of plasma, which contains 6 to 7 Gm. per cent of protein, is one method of treating hypoproteinemia. Another is the injection of solutions of amino acid mixtures, the latter being a method of physiologically short-circuiting the gastrointestinal tract as far as the digestion and absorption of protein nourishment is concerned. While plasma is of dramatic value in acute hypoproteinemia, for nutritional purposes it is more expensive, inconvenient, often ineffective, and theoretically not as satisfactory as amino-acid solutions. For example, one liter of plasma, which requires

Presented at the May, 1944, meeting of the New York City Veterinary Medical Association.

the bleeding of four donors, contains but 60 to 70 Gm. of protein which must be metabolized by being broken down to smaller units or even to amino acids before it can be utilized by the tissues of the body outside the blood stream. Amino-acid solutions, on the other hand, are available in unlimited quantities because they can be made satisfactorily by properly hydrolyzing appropriate proteins. This new method of parenteral protein alimentation has already been used extensively, and may be considered as well beyond the experimental stage. Its use will increase as surgeons realize the importance of protein nutrition and the necessity of supplying it parenterally whenever a patient has been or is unable to ingest any or enough protein by mouth. In preparation for abdominal operations and during the postoperative period, amino-acid and peptide mixtures have already proved of great clinical benefit. Although larger amounts can be given by the intravenous route, such solutions have also been given by hypodermoclysis; because it must be isotonic, the latter method obviously requires more fluid for the same amount of nourishment.

Protein may be given as transfusions of whole blood, plasma, hydrolyzed protein, or mixtures of amino acids.

Transfusions of whole blood and infusion of normal or concentrated plasma are not ordinarily thought of as nutritional measures. They are used for maintaining blood volume and circulation. Every 100 cc. of normal blood contain about 15 Gm. of hemoglobin and 4 Gm. of plasma protein. Hemoglobin is not suitable for replacement of tissue protein. However, injected plasma protein is metabolized to some extent, and so provides a source of nitrogen nourishment and protects, in part at least, against tissue wastage.

Solutions of hydrolysates of casein or other high grade proteins have recently been employed and represent a more physiologic method of providing nitrogenous food parenterally, because food protein is normally hydrolyzed before absorption. Of the various hydrolysates available, only one has been demonstrated to be safe, well utilized, and capable of maintaining nitrogen equilibrium in man and animals. This hydrolysate is prepared from casein by digestion with pancreatic enzymes. Acid hydrolysates should have certain theo-

retical advantages. Up to the present time, it has been impossible to produce acid hydrolysates without destroying certain essential amino acids, notably tryptophan. Since means of circumventing this oxidation have been devised, satisfactory acid hydrolysates may become available. Mixtures of pure amino acids suitable for injection have definite advantages, but they are expensive and are not yet available in large quantity.

It has been demonstrated that the nitrogen requirements of man and animals may be supplied for long periods by infusions of casein hydrolysate or pure amino-acid mixtures. Like all other parenteral methods of feeding, however, this must be regarded as a temporary substitute for normal eating. It is a procedure, moreover, that requires careful attention to detail.

The casein hydrolysate is usually prepared in 5 per cent concentration dissolved in 5 per cent dextrose solution. When neutralized to a pH of 6.5, a liter of this solution contains 5 Gm. of sodium chloride. A liter of such a solution contains the equivalent of 50 Gm. of protein. Between 1.5 and 2.0 liters per day are therefore required to meet the basic demands of normal man for protein. If solutions of casein hydrolysate are properly prepared, they should provoke no pyrogenic reactions. If they are injected too rapidly (faster than 500 cc. of a 5 per cent solution per hour in an adult of normal size) nausea or vomiting may be induced.

Nitrogen Excretion of the Normal dog.—The 10 kg. dog excretes about 2 Gm. N₂ per day. This value increases or decreases depending upon the size of the dog and its habits. Disease, trauma, and fever will increase the output.

Depletion of Plasma Proteins by Loss of Blood.—The organism is well able to restore the plasma proteins lost by simple hemorrhage, provided the previous nutritional status is reasonably normal and there are no other circumstances to interfere with this return. If no more than 25 per cent of the total blood volume is lost, the plasma protein level is usually restored within twenty-four hours or forty-eight hours at the latest. The protein is restored from tissue stores through the lymphatics. Ligation of the thoracic duct will delay such plasma protein regeneration for eight

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days or more. The above facts do not hold true when more than 25 per cent of the blood volume is lost since the animal passes in the shock state.

Nutritional Requirements in Animals Subjected to Surgery or Disease .- When the organism is subjected to trauma, whether accidental, surgical, or disease, the nitrogen loss in the urine is increased due to an elaboration of the "S" hormone from the adrenal glands. Furthermore, the animal can ingest little to no food and so comes to be in markedly negative nitrogen balance which will result in loss of weight and strength, delayed convalescence, retarded wound healing, or dehiscence, and/or failure of tissues to heal (anastomosis).

In placing the dog in positive nitrogen balance, the problem is not so difficult as it is in human beings. Since the dog is carnivorous, it can receive its energy as well as protein requirements through protein foods or their derivatives, (amino acids). Depending on the special situation or circumstance, the animal may be fed amino acids by vein, subcutaneous tissue, or through the gastrointestinal tract (mouth or tube feedings). Ordinarily, 0.2-0.3 Gm. nitrogen per kilogram of body weight will be a high protein intake for the animal. Where trauma has been inflicted, this intake can be increased to 0.4-0.6 Gm. nitrogen per kilogram of body weight or even higher values when tissue fluids are lost through burns, fistulae, peritonitis, infections, etc. The calculation is made in the following way. If 0.4 Gm. nitrogen per kilogram of body weight is needed, then body weight is multiplied by 0.4 to obtain the N₂ requirement. example, a 10 kg. dog will require 4 Gm. of N2. Amigen is 12 per cent N2, there-

fore 0.12 equals 34 Gm. of amigen is required. This will furnish 146 calories. Since the dog needs 30 calories per kilogram for minimum energy requirement, 300 calories will be required. This leaves 154 calories to be supplied by some carbohydrate or even additional amigen. Nutramigen may be used by mouth or tube. It contains the fats and carbohydrates, is 2.7 Gm. per cent nitrogen and furnishes 4.7 per 100 Gm. When parenteral amigen is

used, it is found to be put up in 5 per cent solution and contains 5 per cent glucose. In the previous case, 35 Gm. of amigen were roughly required or 700 cc. of 5 per cent solution. This solution will also furnish 140 calories from glucose.

Experience with dogs in the laboratory reveals that the parenteral solution is well tolerated. However, dogs will usually refuse to eat amigen alone. This may be bypassed by mixing the amigen with some other foods or milk or feedings may be given by tube. If necessary, the animal may have to be fed by temporary gastrostomy or jejunostomy.

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Effect of Wheat Germ Oil on the Fertility of Bulls

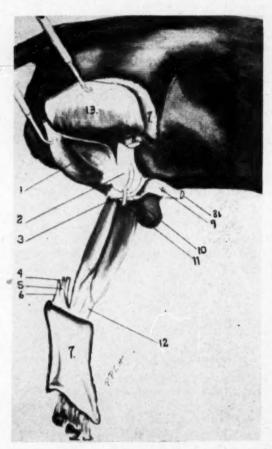
To determine the effect if any of feeding wheat germ oil" to the bulls of the New York Artificial Breeders' Cooperative, Inc., of Syracuse, N. Y., the authors selected 20 of the 28 bulls in use. The test bulls were Holstein-Friesians or Guernseys and had been as nearly equal as possible in respect to breeding performance for the prior three months. Data on average volume of semen, motility of spermatozoa, and spermatozoa count were obtained. The bulls were divided into two groups of 10 bulls each by lot (flip of a coin) to decide which group was to be treated and which kept The hay and concentrates for controls. were assayed for vitamin E potency with rats at different times during the trial. The treated group received, for one year, 1 oz. daily of wheat germ oil certified to contain 2 Evans rat units of vitamin E per Gm. The number and volume of ejaculates, motility, number of spermatozoa, and average service time were tabulated. Over 8,200 cows were inseminated and more than 1,250 semen samples examined during the year. Bluntly told, the results were nega-

[•]G. W. Salisbury, Department of Animal Husbandry, Cornell University: Controlled Experiment in Feeding Wheat Germ Oil as a Supplement to the Normal Ration of Bulls Used for Artificial Insemination. J. Dairy Sci., 27, (July 1944): 551-562.

tive. There was no increase on any score, and the seasonal variations in sperm motility were the same in both groups.

Amputation of the Pelvic Limb of Dogs

The hind leg of dogs is best amputated by disarticulation of the femorotibial joint or at the distal end of the femur if a shorter stump is desired. A cloth fene-



-From the North American Veterinarian.

Illustrating Frick and Haney's technique of an amputation at the stifle: 1, incised gastrocnemius; 2, femur; 3, incised deep digital flexor; 4, 5, stubs of the superficial digital flexor and gastrocnemius; 6, tuber calcis; 7, skin flaps; 8, 8b, vastus lateralis; 9, patella; 10, incised tibialis anterior; 11, incised long digital extensor; 12, tibia, distal end; belly of biceps femoris, turned upward.

strated for the limb to be amputated is wrapped over the hind parts of the body. Though epidural anesthesia will answer, general anesthesia is preferable. Asepsis is a matter of course.

The operative technique follows a definite routine: A semieliptical incision is made across both the lateral and medial faces of the leg from the posterior to the anterior face, two inches below the articulation. The skin flaps are turned upward and downward to expose the stifle, the latter as far down as the tarsus. The metatarsal artery and the external saphenous vein are ligated above the site of amputation, the tendo-Achilles is incised at the tuber calcis, and the muscles lifted from the underlying musculature. The gracilis, biceps femoris. and semitendinosus are then dissected from the anterior tibial crest and the sartorius and semitendinosus incised at their insertions. The patellar ligaments are detached from the femur and the musculature from The capsular ligament is the patella. incised dorsally, separated from the popliteus, and the semimembranosus detached at the tibia. The amputation is completed by scraping the articular cartilage from the condules and trochlea to prevent a fistula. The stump is arranged by folding the gastrocenemius over the trochlea and suturing it to tissue in front of the femur to form a padding. The skin flaps are approximated with mattress sutures superimposed with catgut sutures along the edges. While the description seems complex, the operation is but the skinning out of the tibia by severing the muscles at their attachments in lieu of through the belly.-[Edwin J. Frick, D.V.M., and D. Ross Haney, B.S.A., D.V.M., Kansas State College: Amputation of the Hind Leg of the Dog. North Am. Vet. 25, (Sept. 1944): 543-545.]

Sulfathalidine

Sulfathalidine (phthalylsulfathiazole) enters the ranks of the sulfa parade as the drug of choice in bacillary infections of the intestinal tract on the ground of slow absorption, low toxicity, and small dosage. It is employed in cattle, hogs, dogs, and cats. The main indications are calf scours, necrotic enterities of swine, the enteritides of small animals, and surgical infections. Daily dose per pound of body weight: Ruminants, 3/4 to 13/4 grains; hogs, 3/4 grains; dogs and cats, 1 grain.

The drug may be given in the form of tablets or shaken up in water and drenched. Important results are reported in preventing postoperative, pyogenic infections.

CLINICAL DATA

Clinical Notes

Corn shortage affects serum, according to manufacturers of serums to prevent hog cholera. Corn, they say, makes hogs bleed freely. The corn shortage is seriously curtailing their production of serum and virus.—Pathfinder, July 24, 1944.

In man, intradermal injections of tuberculin occasionally cause severe, distressing vesiculation, with sloughing of tissue and scar formation. The injections are usually made into the skin of the flexor surface of the forearm. The test is made extensively in children. In some hospitals, all children admitted are tuberculin tested.

Amputating the comb and wattles of chickens (= dubbing) is best done with a sharp pair of shears, although a sharp scalpel will answer the purpose. The main object of dubbing is to prevent the depressing effect of frozen combs and wattles, which naturally interferes with fertility and egg production. Moreover, roosters are able to eat from feeders. Whether dubbing steps up vigor is questionable.

Influenza Vaccination

The status of influenza vaccination (human) was indicated by trials carried out in the Army last winter. Soldiers were vaccinated against influenza types A and B, and checked against an approximately equal number of unvaccinated. Among the 6,262 vaccinated men, the morbidity was 2.22 per cent as against 7.11 per cent in the unvaccinated group. The vaccine was made from virus grown on the allantoic membrane of hens' eggs at the start of embryo development.

I am convinced that in this area cobalt deficiency in some dairy herds is definitely related to reduced fertility, and emaciated calves in my practice, in addition to other treatments, they always respond better when supplied with cobalt.—Chas. Haasjes, D.V.M., Shelby, Mich.

Trials carried out in mice at the Mayo Clinic show that penicillin may cure rat-bite fever, the specific human infection caused by Streptobacillus moniliformis or Spirillum minus. The former may cause an epidemic not caused by rat bites.—From Science News Letter.

While certain strains of chickens are more resistant to range paralysis (= leucosis) than others, no breed per se is exempt. No cure or preventive has yet been developed, other than selecting resistant strains.

Symptoms alone are seldom a sufficient means of diagnosing diseases of fowl. Autopsies and laboratory examinations are indispensable in poultry practice.

The Rh Factor in the Newborn

Langley and Stratton investigated 21 cases of hemolytic disease of the newborn clinically, pathologically, and serologically. They were able to confirm the relation of this condition to the Rh factor, and in 19 of 21 cases an anti Rh agglutinin was found in the maternal blood. Of 12 necropsies, 11 showed the characteristic extramedullary hemopoiesis of hemolytic disease of the newborn. The breast milk of 10 of the mothers was examined, and 7 samples were found to contain the antiRh agglutinin.—
[Lancet, Jan. 29, 1944. Abstr. J.A.M.A. 125, (Jan. 29, 1944): 522.]

Hybrid food crops promise to increase the production of certain foods from 25 to 50 per cent. On the already sizable list is alfalfa.

Mushroom Poisoning in Cattle

PAUL L. PIERCY, D.V.M., GIFFORD HARGIS, D.V.M., and CLAIR A. BROWN, Ph.D.

Baton Rouge, Louisiana

DURING late September and early October. 1943, cattle owners in a part of the Louisiana Piney Woods region experienced losses in their herds by suspected poisoning on range pastures. Several cattle, regardless of breed, age, and sex, died in Rapides, Vernon, Grant, Winn, and Natchitoches parishes. Numerous others, observed to become sick, recovered. Dr. H. A. Burton, practicing veterinarian at Alexandria, La., was summoned to attend some of the herds with this condition in that area. As his interpretation of case histories and environmental conditions made him suspicious of mushroom poisoning, critical investigation was prompted.

A search through the literature failed to reveal many reports of mushroom poisoning in cattle. Chesnut1 mentioned two poisonous species belonging to the genus Amanita and made brief reference to their toxicity for cattle as well as for man. Three species of the same genus are most deadly, according to Sampson and Malmsten² who stated that livestock are poisoned by them. The amount necessary to produce toxicity has not been determined in the instance here reported: but with the grazing history obtained, apparently relatively large amounts were consumed by cattle before clinical manifestation developed. However, the results of experimental feeding made it appear probable that cattle will not eat mushrooms unless forced to by a lack of palatable forage. Animals in affected herds appeared to relish the fungi and were noted to seek them in preference to other range plants which were available.

TYPE OF PREDOMINATING RANGE PASTURES

The summer season in Louisiana had been extremely dry and warm and was followed in mid-September with heavy drenching rains that accompanied a hurricane disturbance in the Gulf of Mexico, Warm climatic temperatures and moisture provided by the rains made conditions ideal for mushroom growth. Spores which had been

dormant due to lack of moisture during the preceding months developed rapidly and the ground of the wooded areas became literally white with mushrooms.

One herd near Hineston, La., in which losses had occurred, was visited on Oct. 22. 1943. It was composed of about 30 adults and calves. Although all but 2 of these had been sick, most of them had recovered. Four affected cattle had died in this herd and 5 recovering cows were still showing some evidence of the condition. This farm was located in a cut-over longleaf pine region which has been growing up into a second growth of black jack oak, Quercus marilandica, post oak, Quercus stellata, and red oak, Quercus rubra. The ground cover consisted of the usual species of native grasses in the genera Arisitda, Andropogon, Sorghastrum, Panicum, and Paspalu. Dallis grass, Paspalum dilatatum, which has sometimes become heavily infected with ergot in Louisiana was not present. An examination of the open range and, in particular that near the small stream where the cattle drank, failed to show any flowering plants known to be poisonous. A St. Johnswort, Hypericum densistorum, a close relative to the species causing a photosensitization toxicity and the bracken Pteris aquilan var. pseudocaudata, were present in small amounts, but did not show any signs of grazing. There were scattered through the woods an unusually large number of specimens of the destroying angel, Amanita verna, as well as other fungi.

Symptoms.—Due to the conditions under which these animals were grazing, it was not possible to determine the quantity of mushrooms necessary to produce symptoms, nor was it possible to determine the time between ingestion and the development of

clinical symptoms.

Characteristic manifestations which appeared in all the affected animals were painful defecation and matted feces around the base of the tail and ischia. Each time the bowels were evacuated, the animals refused to raise the tail sufficiently to permit free passage of the feces, apparently because of intense pain in the rectal region. Manual examination revealed severe irritation with

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numerous vesicles, papules, and necrotic areas on the anus. These lesions extended onto the lips of the vulva which became smeared with feces at each defecation. A highly irritating substance in the feces seemed to be present. When the anal sphincter was dilated to permit rectal inspection the rectal mucosa was found to be denuded and ulcerated. In some instances, rectal prolapse had occurred. The fecal material was usually normal in consistency. but a few animals had slight diarrhea. There was marked loss in weight, but no anorexia: appetite and rumination were normal until just before death. Hemoglobinuria was noted in some. Respiration was normal, but the pulse was slightly accelerated. The body temperature did not exceed 103 F. in the cattle examined. In fatal cases, the animals died in convulsions.

Morbid Anatomy.—Postmortem examination was performed by Dr. Burton on 2 calves. One had been sick for several days and the other for only a few hours. Marked inflammation was present throughout the digestive tract. The mucous lining sloughed off readily on rubbing. The stomach and intestinal contents were about normal except for some sections of semi-solid fecal matter. The liver was enlarged and dark with numerous hemorrhagic areas, petechial to ecchymotic, some of which extended into the liver tissue. The heart also was mottled with similar hemorrhagic areas. The kidnevs were slightly light in color and the bladders of both animals were markedly distended with urine.

MUSHROOM POISONING IN EXPERIMENTAL ANIMALS

Range cattle in the region described had frequently been noted to eat the mushrooms voluntarily and apparently preferred them to the coarse, dry forage available. One of the cows in the Hineston herd tried to obtain a single mushroom specimen from the hand of the person offering the plant. It thus appeared that the mushrooms were palatable to these cattle. A limited number of Amanita verna specimens brought back to the laboratory were used in feeding a rabbit and a calf which had been receiving good quality feed. Neither of these animals ate the mushrooms voluntarily. Even after periods of starvation, they showed no evidence that the fungi were palatable to

them. For experimental purposes it was necessary to resort to forced feeding

One small mushroom was ground by mortar and pestle, mixed with water, and forced into the stomach of the rabbit through a rubber tube on October 26. About four hours later, the animal was depressed and nauseated for a period of two hours. Following that, it appeared to be normal and remained so up to the time of its death, which occurred during the night of October 28. It appeared to have died in convulsions. Postmortem examination revealed tissue changes similar to those found in the cattle. There was marked hemorrhagic gastritis with a few small ulcerating areas on the stomach lining, and the stomach wall was thickened. Inflammation was extensive in the intestinal tract but most marked in the rectal region. The liver was enlarged. darkened, and friable, the gall bladder also was enlarged. The kidneys were slightly inflamed while the urinary bladder was markedly distended with urine of brick-red Several ecchymotic hemorrhages were present on the surface of the lungs and heart.

The calf used for experimental feeding weighed approximately 250 lb. The fungi were packed in gelatin capsules and administered with a balling gun. This animal received 53 Gm. of the suspected mushrooms on October 28, 80 Gm. the following day, and 83 Gm. the next day. The supply of mushrooms being depleted, feeding was dis-The calf failed to show any continued. abnormalities. With due consideration of the rank growth of mushrooms that had been reported on the range pastures in the Piney Woods section in question and the preference that cattle showed for them while grazing, it is not unreasonable to assume that the total of 216 Gm. of mushrooms received by the calf was a small percentage of the daily consumption by similar cattle on the range and probably was insufficient to produce clinical manifestations.

About the same time that this investigation was being made, the rumen contents of a cow which had died in the same general area and under conditions similar to those associated with the Hineston cattle, were received for examination at Louisiana State University. The contents were found to include two unusual materials among the predominating normal contents: (1) The

pieces of pine cones present indicated that the animal had been willing to eat anything which appeared the least bit nutritious, and (2) the particles of fungi identified in the contents provided definite proof that the animal had been eating mushrooms.

The heavy mushroom growth practically disappeared with the advent of warm, dry weather in October. Thereafter, cattle in the areas ceased to be affected. As mushroom growth and prevalence depend upon warm, moist weather, they probably are only rarely responsible for cattle losses. When range cattle are maintained on ample and nutritious forage, the danger of poisoning by mushrooms is apparently minimal.

ACKNOWLEDGMENT

The authors are indebted to Dr. E. P. Flower, state veterinarian, and Dr. A. H. Groth, head, Department of Veterinary Science, Louisiana State University, for assistance in making these field and laboratory investigations possible.

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Bubonic Plague and Sulfa Drugs

Among the most promising developments of sulfonamide therapeutics is the curing of guinea pigs experimentally infected with bubonic plague. Wayson and McMahon (Pub. Health Rep. March 14, 1944) report that inasmuch as the plague is pretty much the same in guinea pigs and man, the cures they have obtained in guinea pigs seem important. While the rigorous preventive measure (killing rodent fleas) in vogue stands first, a cure for the sick would remove some of the dread.

The colleges which graduated the four chiefs of the United States Bureau of Animal Industry—1884 to 1944—were Cornell University, Chicago Veterinary College, University of Pennsylvania, and Kansas City Veterinary College. In that order came Salmon, Melvin, Mohler, and Miller.

What Is the Rh Factor?

Rh is a newly found factor of human blood that is complicating the typing of blood groups (A, B, O, AB), so called we believe, because it was first detected in the blood of the Rhesus monkey of India. It is a substance or factor that promises to explain certain unknowns about blood-transfusion accidents, miscarriages, still births, infant mortality, lack of growth in the newborn, sterility, and even deformities now blamed on other factors (e.g. syphilis).

In 1940, Drs. Landsteiner and Wiener discovered that if the blood of the Rhesus monkey is injected into rabbits and guinea pigs it produces a substance in their blood serum that agglutinates the monkey's ervthrocytes in vitro, and also of human blood, but not always, because some human beings do not possess the Rhesus monkey (Rh) factor against which Rhesus agglutinins react. Further studies disclosed that about 85 per cent of white people (Americans) of both sexes are "Rh plus" and 15 per cent "Rh minus." In the Negro, the ratio of the plus to the minus persons was 90:10, and in Indians and Chinese as high as 99:1. Not being a sex-linked factor, males and females may or may not possess the Rh factor. Its presence or its absence is inherited in obedience to the Mendelian law, that is, persons who inherit Rh factor from both parents will bear only Rh plus children when they mate. But an Rh plus person who had one Rh plus parent and one Rh minus, will, if he or she mates with someone who is Rh minus, have offspring who have an even chance of being either.

Rh does not run parallel to any other classification of blood. It is an independent entity, but happily, its presence can be quickly detected by laboratory methods—clumping of erythrocytes. The new study is, however, further complicated by there being at least five variants to reckon with.

Much remains to be discovered about this substance in the practice of medicine, and since it appears to have descended to man from primates through eons of time, its significance in animals other than the Rhesus monkey remains to be disclosed.

The birth rate of Great Britain in 1943 was the highest for eighteen years.

Blindness with Papilledema in Calves

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BLINDNESS in calves, reported at various times, has been a problem in some breeding herds. Four cases of blindness in calves, brought to our attention by Dr. James V. McCahon in connection with a study of diseases of the eyes, form the basis of this report.

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The herd consisted of 70 purebred Guernseys with an average of 32 milking cows. This herd had been on the premises during the past ten years. A total of about 15 calves, all heifer calves, was being raised each year. Some cows were being disposed of from time to time as shy breeders and culls. The herd was kept under good conditions and this was the first blindness that had been noticed. During a period of seven months, 4 calves were detected as blind; they showed a lack of alertness and walked into objects; on close inspection the eyes appeared staring and unnatural.

Calf 1 was dropped Dec. 10, 1941, and no abnormality was noticed until about January 1943, when she was a little over 1 year old. At that time, she was noticed to be less alert and to have difficulty in finding the feed trough. These changes appeared suddenly. Closer examination indicated that the right eye was blind. When the hand was suddenly thrust at that eye, no reaction was obtained. Soon the left eye would not react to movement. There was no other noticeable change in the eyes.

Examination of the eyes in August 1943, showed the following: No changes could be detected in the superficial structures of the eyes. The lids appeared normal, the corneas were clear, and there was no evidence of conjunctivitis. A small light flashed on the eyeball produced no response by the pupil; the iris remained dilated, and the images from the lens and capsule were normal. Examination with the ophthalmoscope showed the vitreous clear and the eye ground normal. The blood vessels of the eye could be clearly distinguished. At the papillus they ended rather abruptly and seemed smaller than

normal. The papillus appeared faded and

Calf 2 was dropped Nov. 29, 1941. In January 1943, about one week after discovering that calf 1 was blind, it was found that this heifer also was blind but the condition had not been noticed previously. She walked into things and when her sight was tested she was found blind. This heifer had been bred May 25 and July 5 but it was not known whether or not she was pregnant. The herdsman mentioned at the time the blindness was noticed, that the heifer had a rough coat and was unthrifty.

Examination of the eyes in August 1943, showed the lids normal without swelling or noticeable change. There was a vacant gaze and the pupil of each eye was dilated. The use of a small light flashed on the eye gave no contraction of the iris. It remained wide open, so open that even with a flash light one could see the blood vessels and even the papillus. The pupil appeared almost an exact circle. The ophthalmoscope showed the remnant of the hyaloid artery with its narrowed and abrupt point almost reaching the capsule of the lens in the right eye. The optic disc appeared faded and slightly swollen with large blood vessels ending abruptly in its center.

Calf 3 was dropped Feb. 19, 1942. This calf was kept with 2 others in the small shed used for heifers. The heifers were turned out daily for exercise and obtained water from a small stream. Calf 3 was first noticed to be abnormal at about 9 months of age when she appeared rather dumb and was observed to walk into objects. The herdsman believed that this heifer was in good condition at that time, with a good coat, and was thrifty. This heifer came in heat at about 11/2 years of age but was not bred. When examined shortly after this time, both eyes gave a stary appearance and the pupils were widely dilated. The cornea was clear. There was no response in the pupil to light flashed in either eye, the pupils remaining widely dilated. The aqueous was clear and, with a small light, one could look directly into the fundus.

The ophthalmoscope revealed the eye-

From the School of Veterinary Medicine and School of Animal Pathology, University of Pennsylvania, Philadelphia.

ground to be clear with the blood vessels standing out. The disc was pale with some swelling.

Calf 4, dropped July 5, 1942, stood in the same calf barn as calf 3. She was turned out daily during the winter for four to five hours for exercise and obtained water from a nearby stream. This calf had suffered from scours at various times. The first abnormality was noticed about one month previous to examination or when the heifer was about 1 year old. It was thought that the right eye was affected but that the left one had its sight.

Examination of the left eye showed the pupil somewhat dilated, otherwise normal. A small light focused on the pupil produced response and the pupil contracted, coming down about half way. The ophthalmoscope showed the eyeground clear without any disturbance in the vitreous. Large blood vessels were seen from the papillus. There appeared to be a pinkish fluffy material over the disc which was difficult to see in

detail and appeared swollen.

The right eye showed the pupil widely dilated and there was no response to light flashed on the cornea. The cornea was clear, there was no discharge from the eve. and no injection of circumcorneal or conjunctival vessels. The ophthalmoscope revealed a clear lens, clear eyeground with large distinct blood vessels, and no turbidity in the vitreous. The optic disc was grayish, rather thick, and with a pink, fluffy appearance on its anterior surface.

The last 2 heifers were from a group of 3 heifers kept in a calf pen located under a garage. Part of this space was used for the storage of potatoes during the winter. It was the custom to shut the pen tightly during the night in cold weather but in the daytime the calves were allowed to go out for exercise and to get water from a nearby stream. Two calves of this group were found blind but the third calf continued normal and careful observation of the eyes, including ophthalmoscope examination, revealed no abnormality. Questioning brought out that these heifers had not received any corn silage. First cutting alfalfa had been fed for awhile but most of the roughage had been a low grade hay.

These were typical cases of choked disc or papilledema. Similar cases were reported by DeSchweinitz1 and DeSchweinitz and DeLong,2 some of which were subjected to postmortem examination by the writer at

the School of Veterinary Medicine, University of Pennsylvania. DeSchweinitz1 cited heredity as a possible cause. This phase was investigated. Heifer 1 was out of a cow bred when purchased, but traced back to a famous Guernsey strain. Heifer 2 was by a sire that had been sold but also traced back to the above strain. The other 2 were by the same sire, which is still service, and whose eyes appeared This sire traces back to the previously noted famous Guernsey strain. The dams were not closely related. It was interesting to learn that another bull, a full brother of heifer 1 was impotent as a sire because of dead sperm. Just what effect heredity played, if any, was not entirely known, but each of these cases traced back to a common strain.

DeSchweinitz and DeLong² have shown that a perivascular edema of the cerebral hemispheres is found in papilledema of calves. They believe this cerebral edema probably causes the increased intracranial pressure responsible for the papilledema. Hart and Guilbert³, discussing the symptomatology of vitamin-A deficiency in domestic animals, call attention to night blindness as the first symptom. These authors found stenosis of the optic nerve channels in 3 test calves that became blind without showing external lesions in the eyeballs during vitamin-A privation. Moore, Huffman, and Duncan4 have reported blindness in cattle, probably of nutritional origin. They state that a deficiency of vitamin A may or may not be a cause and believe that corn silage, timothy hay, and cod liver oil contain a factor or factors that prevent blindness. Moore and Sykes reported a deficiency of vitamin A in the ration of calves produced an increased cerebrospinal pressure accompanied by papilledema, nyctalopia, syncope, and incoordination. Wetzel and Moore⁶ reported 6 cases of blindness in calves with constriction of the optic nerve and associated with papillary edema probably due to increased intracranial pressure. These calves showed epileptic-like seizures and wobbly gait. Their evidence indicated a nutritional deficiency probably due to deficiency of vitamin A in the rations. Moore7 reported that mature cows on vitamin A-deficient rations failed to develop blindness as has been reported in calves and papilledema failed to develop in 2 out of 6 experimental cases.

The cases of papilledema coming to our

attention were not tested for night blindness because they were not usually detected until they were noticeably blind. None of our cases showed any evidence of wobbly gait or epileptic-like seizures. Papilledema, once present, seemed to be permanent or to recede very slowly even with ample vitamin-A intake. This made treatment difficult. Where treatment is attempted, it would seem to be the use of good feed strongly fortified with vitamin A. Hart8 recommends as good sources of supply of vitamin A. "all green feed, bright green hay, grass silage, yellow vegetables such as carrots, sweet potatoes, and pumpkins; also fish oils and dairy products. Yellow corn, corn silage, and well-cured hays which have not been stored too long are fair sources of the vitamin. It [vitamin A] is an unstable compound and decomposes by oxidation into inert products. Storage of feeds rich in this substance when harvested, manufactured, or mixed, usually results in a very large percentage being destroyed. This is important because it shows the need for securing a history of the animals and the rations they have been fed when the deficiency is suspected."

Information at present available does not show that such blind animals give birth to similarly affected animals. However, one would hesitate to advise the use of blind animals for breeding purposes. Such blind calves are difficult to handle and cannot take their rightful place in any group. increasing difficulty in obtaining good feed and well-balanced rations may be reflected in increased numbers of blind calves. The best service that the veterinarian can render is to prevent the occurrence of such cases, or if they do occur, detect them early and advise the use of the best possible feeding methods to prevent the development of blind calves.

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Fluorine Both Useful and Harmful

Drinking water not containing more than 1 part per million of fluorine is not considered of public health significance.* Where the amount of fluorine falls below that ratio, a higher incidence of dental caries prevails and where the percentage runs above that figure there is a high incidence of mottled enamel and caries. The objective of public health services is to provide a water supply containing fluorine 1 part to the million.

The harmful effect of a high intake of fluorine in animals is no longer disputable. Capable manufacturers of mineral supplements for farm animals guard their products against overdosing with this essential element.

*J.A.M.A., 1925, (July 8, 1944): 790.

Future generations will speak of this period as the time when sulfa drugs, tyrothricin, penicillin, and the vitamin Bs marched into the medical churchyard to witness the reincarnation of chemotherapy.



-From The DeLaval Monthly

Posch Sally Ormsby, champion lifetime living Holstein-Friesian producer of Canada. Owned by Fred M. Snyder, Waterloo, Ont. In eleven years (eight lactations), she produced 127,080 lb. of milk and 4,213 lb. of butterfat and is due to freshen for the ninth time.

Water as a Vehicle for the Infusion of Sulfanilamide in the Treatment of Mastitis

C. B. KNODT, Ph.D., and W. E. PETERSEN, Ph.D.

St. Paul, Minnesota

SULFANILAMIDE suspended in oil has been shown by Kakavas, Palmer, Hay, and Biddle¹ to be effective in the treatment of bovine mastitis involving streptococci and staphylococci. They also presented evidence which demonstrates that sulfanilamide in a concentration of 20 mg. per cent has no bactericidal power against Streptococcus agalactiae at 37 C. while a concentration of 1 per cent is sufficient to destroy all strains of the organism studied at this temperature.

The method of sulfanilamide-in-oil as recommended by Kakavas, et al.¹ requires a series of four or more treatments and therefore some means of administration of sulfanilamide which would decrease the number of infusions required is desirable. Also, since the sulfanilamide-in-oil presents some problems in administration, it is desirable to find a simpler method.

In our experiments, various vehicles were considered in an attempt to find some method whereby the concentration of sulfanilamide throughout the entire mammary gland might approach a concentration of 1 per cent or more. Filling the mammary gland with distilled water has been shown by Petersen and Rigor² to have only a transient effect upon the mammary gland. This was true also in five experiments which were conducted in connection with this work. Distilled water was then used as a vehicle for sulfanilamide because of the greater solubility of the drug in this vehicle (1 Gm. in 125 cc.) than in oil where it is only slightly soluble and because the gland could be completely filled with this vehicle without any great physiologic disturbance. In this way, a much higher concentration of sulfanilamide could be obtained throughout the entire mammary

gland. It was thought, therefore, that the administration of sulfanilamide in water might be a more effective and a more satisfactory means of intramammary infusion.

Sulfanilamide is soluble in water to the extent of 0.8 per cent. It was observed that powdered sulfanilamide Merck when shaken with water in a 10 per cent concentration of sulfanilamide would readily flow through the ordinary intravenous injection apparatus equipped with a standard teat cannula instead of a hypodermic needle. The air which then passes up through the sulfanilamide agitates the preparation and permits infusion into the mammary gland via the teat canal.

PROCEDURE USED

The quarters treated were completely milked before infusion. Early in this work, 50 Gm. of sulfanilamide were used. It was found that 60 Gm. were tolerated. Even larger amounts up to 100 Gm, might be used advantageously. The 60 Gm. of sulfanilamide were shaken with 600 cc. of distilled water. Some glands would not hold the 600 cc. of fluid but were filled with as much of the preparation as possible. The 1,000 cc. flask used was equipped with the standard intravenous injection attachment with the hypodermic needle being replaced by a standard teat cannula. The sulfanilamide preparation was then allowed to stand for one or two minutes. The tube and cannula of the apparatus were then filled with the fluid above the sulfanilamide precipitate and the cannula was placed well up in the teat canal of the quarter treated. The flask was then rapidly inverted and shaken until the preparation began to flow as was shown by air passing up through and agitating the fluid. It is quite important that not more than fifteen minutes elapse following preparation before infusion of the fluid because of aggregation of the sulfanilamide crystals. These crystalline aggregates tend to pack and prevent the flow of the preparation through the intravenous apparatus tube. When the

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From the Department of Dairy Husbandry, University of Minnesota, St. Paul.

sulfanilamide was damp or was wetted for any length of time before infusion, great difficulty was encountered in the administration as aggregation readily occurs in the presence of water. In those quarters which have a capacity of greater than 600 cc., sufficient water was then infused only to fill the quarter. The quarter was considered to be well filled when the surface of the water in the flask was approximately 10 to 12 inches above the upper level of the mammary gland when the flow ceased.

Where only one quarter of a cow was treated, as was the case in the last two experiments, a 60 Gm. dosage was employed. Where more than one quarter was treated, it seemed desirable that the total dosage should not exceed 100 Gm. of sulfanilamide although amounts up to 120 Gm. were infused without serious effects upon the cow.

A limited number of acute as well as chronic cases of mastitis have been treated with promising results. Five of these cases appeared to be due to streptococci and 5 cases seemed to be due to infection with coliform types.

Experimental Animal 1 in this group had been injected in the right front and right hind quarters with sterile mineral oil on May 2, under conditions as asceptic as possible. Acute mastitis presumably due to coliform types developed in the right front quarter in the afternoon of May 7. The quarter was infused with 300 cc. of a preparation containing 50 Gm. in 500 cc. of sterile distilled water in the afternoon on May 8. At this time, the milk had become serous and ropy in character. Marked inflammation was evident throughout the quarter. Figure 1 presents the data of this experiment. This quarter was checked repeatedly from May 10 through May 23, and no coliform types were detected during this period. There was no clinical evidence of mastitis on May 23. A rapid return to normal milk production may be observed in figure 1. The leucocyte count and per cent of milk fat soon returned nearly to normal levels while the pH, lactose, and chloride remained high for some time. The appearance of the milk from the affected quarter was normal seventy-two hours after treatment.

Experimental Animal 2 also apparently was suffering from a coliform type of infection of the left hind quarter which had been affected with acute mastitis every two

to three weeks for a period of several months prior to treatment. Twenty-four hours prior to treatment, this cow again developed acute mastitis in this quarter. Fifty Gm. of sulfanilamide in 500 cc. of sterile, distilled water were infused into the udder on May 7. Milk production of this cow reached a level above that for sev-

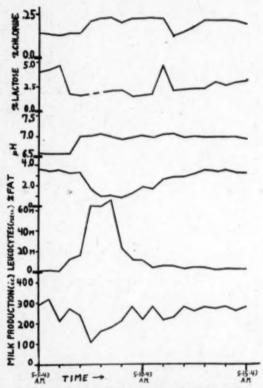
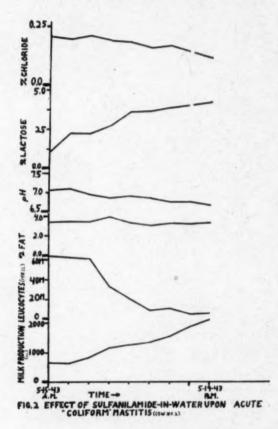


FIG.1. EFFECT OF SULFANILAMIDE-IN-WATER UPON ACUTE
"COLIFORM" MASTITIS (CON NO.1)

eral weeks prior to treatment. Milk production rapidly increased on the affected quarter and chloride, pH, and lactose values soon returned nearly to normal levels. This quarter again showed signs of the presence of coliform types in the afternoon of May 20, and 60 Gm. of sulfanilamide were administered in 1,600 cc. of tap water. This quarter again returned to normal production and chloride as well as lactose values were approaching normal sixty hours after treatment. This quarter showed no evidence of the presence of coliform types on May 28.

Two other cases which appeared to be of the coliform type of mastitis were each

treated with 60 Gm. of sulfanilamide in tap water. Both cases had been chronic for a long time but were acute at the time treated. One of these returned practically to normal in twenty-four hours while the other required one more treatment sixty hours later; after which it quickly returned



apparently to normal condition. Both of these quarters seemed to be free from coliform types eight days after the original treatment.

One other case of mastitis presumably due to coliform types is important because it had been acute for a period of two weeks prior to treatment. The milk had become serous with a few clots and was bloody in appearance at the time of injection. Two infusions of 60 Gm. of sulfanilamide were made forty-eight hours apart. The milk returned nearly to normal composition within six days following the first treatment. This quarter was apparently free from coliform organisms six days following the first treatment.

Similar observations were made upon 4

cases of chronic and 1 case of acute streptococcic mastitis. A rapid recovery was observed in all of these treated quarters as shown by the absence of streptococci and by chemical analysis for chloride, lactose, pH, and milk fat.

DISCUSSION

The observations previously presented suggest that this method may be of value in the treatment of mastitis of dairy cattle. While the number of cases presented is limited because of available animals, the results indicate that this or some modifications of this method may be utilized to good advantage. The method requires only a small amount of easily obtainable and inexpensive equipment and material, and infusion of the preparation is performed easily and rapidly.

In the cases studied, the method was found to be of value in the treatment of mastitis. It is believed that better results may be expected in the treatment of a quarter in its initial attack because in chronically infected quarters the organisms may have become well established.

The method and data obtained are published because of the emergency which exists and because of the results obtained which although limited in number are suggestive of a desirable method. Further work is still necessary before the exact evaluation of this type of therapy can be given.

CONCLUSIONS

A method is presented which utilizes water as a vehicle for the infusion of sulfanilamide into the bovine mammary gland. Water is used because it seems to have relatively little physiologic effect on the gland and because of the comparatively high solubility of sulfanilamide in this vehicle as compared with those carriers now in general use. Since it has been shown by Kakavas et al. that a high concentration (1%) is essential for the destruction of some of the streptococci, this method offers a means whereby this can be more nearly accomplished.

References

¹Kakavas, J. C., Palmer, C. C., Hay, J. R., and Biddle, E. S.: Homogenized Sulfanilamide-In-Oil Intramammary Injections in Bovine Mastitis. Am. J. Vet. Res., 3, (1942): 274-284.

³Petersen, W. E., and Rigor, T. V.: Osmotic Pressure and Milk Secretion. Proc. Exptl. Biol. Med., 30, (1932): 259-264.

Vitamin A Therapy in Acetonemia

numerous cases of acetonemia (Simcoe, Ont.) in the springs of 1943 and 1944 afforded the opportunity to try the vitamin A treatment reported by Patton (Vet. Med., Apr., 1944) and to study the required dosage. Sixteen cases of the digestive type in Ayrshires, Holstein-Friesians, and Jerseys are reported. The Ayrshires were given 300,000 units of vitamin A the first day, 200,000 units two days later, and 100,000 units after a lapse of another two days. There was a marked increase in milk after five days. For Holstein-Friesians, 400,000 units the first day. 300,000 units two days later, and decreased to 100,000 units daily, were employed. One excitable Holstein-Friesian received 500,000 units as the initial dose, and 300,000 units daily. The dose of 250,000 units was established for Jerseys as the initial dose and decreased daily thereafter. One Jersey that did not respond was given 400,000 units with quick response. Another case of this breed affected also with metritis responded through the addition of sulfanilamide. The drug was given per os in capsules of 50,000 units each with the balling gun. If left for the owner to give, the capsules were dissolved and drenched with water or milk. Summarizing, the author recommends 250,-000 to 500,000 units as the initial dose, with a total of 600,000 to 1,000,000 units during the treatment. Visible improvement was sometimes observed in twenty-four hours.-A. C. Burt, Observations of Vitamin A Therapy. Canad. J. Comp. Med. and Vet. Sci., 8, (July, 1944): 187-188.]

Mounting Livestock Production

The war has stepped up livestock production to all-time record heights, that is, from the prewar ten-year average of 132,-000,000 head (cattle, hogs, sheep, horses, fowl) to 171,000,000 for the year ending Jan. 1, 1944. The fact that the increase was brought about without any serious visitation of major plagues is complimentary to the watchfulness of the veterinary service, since the increase was accomplished without a corresponding expansion of housing facilities and feed production. On the contrary, housings, feedlots, and pastures were over-crowded in many instances and labor was none too abundant. Students of epizoötiology, however, are not universally convinced that the sudden increment may not have postwar repercussions through over-confidence on the one hand, and the lurking nature of infections on the other. Where seeds are planted, there will be a harvest to reap.

Reduction in Poultry Recommended

In a recent address, W. C. Berger, chief, feed management branch, War Food Administration, urged a reduction of 10 per cent in the number of laying hens on farms in the United States to keep within feed limitations.

Dr. T. C. Byerly, senior poultry husbandman of the U. S. Department of Agriculture, strongly emphasized that the reduction should be largely among older birds because after the pullet year more feed is consumed for eggs produced. He stated that the 150,000,000 hens over 18 months of age in this country should be reduced to 30,000,000.

While birds under 18 months of age greatly predominate, there are many farmers in the Middlewest that still keep hens for more than one laying year. These older birds go through a long unproductive moulting period and are often badly infected with tuberculosis. Only valuable pure-bred breeding flocks with high egg production records should be kept over and these constitute not to exceed 5 per cent of all flocks. These older birds should be either tuberculin tested or kept in confinement apart from the pullet flock, and the houses thoroughly cleaned and disinfected after disposal.

Trapnest records in 14 states show that hens lay, on the average, 30 per cent more eggs during the first twelve months of production than the same hens produce during the second laying year.

Tuberculosis in cattle has been almost completely eliminated in the United States. However, according to the records of the U. S. Division of Meat Inspection, 7.9 per cent of all hogs slaughtered in 1942 showed lesions of this disease, largely of the avian type. While this was reduced to 7 per cent in 1943, there was still a waste of 14,000,000 pounds of pork and pork products condemned for tuberculosis in 1943.

There is now a strong trend toward allpullet flocks to produce more eggs from feed consumed, and tuberculosis in poultry and hogs is on the decrease as a consequence.— [H. R. Smith, General Manager, National Live Stock Loss Prevention Board.]

Same Drug, Different Name, Our Remedy

The British correspondent to the Journal of the American Medical Association makes grievous objection to the bewildering number of remedies, essentially the same, which go into the drug trade under different names, some disappearing after brief popularity. Manufacturing chemists and low sales resistance of physicians are blamed for the evil and no one does anything about it. The situation is familiar in all countries and in all branches of medicine. What to do is another matter. The author has no remedy except the usual dream of throwing the evil into the laps of the unhappy public officials. A more promising way would be to develop sales resistance by studying the medical sciences.

Skin Lesions in Brucellosis (Human)

Ten per cent of all veterinarians in Switzerland acquired cutaneous lesions after obstetric interventions on animals infected with Brucella abortus. According to Schoch, these lesions are due to an allergic reaction of the skin to contact with Brucella organ-Acute brucellosis does not need to be present, because cutaneous lesions were seen not only in persons who had had brucellosis but in some who never had it. If the exanthems do not accompany acute brucellosis, the general condition may be good; fever and swelling of lymph nodes may be absent. The most frequent cutaneous manifestations are papulopustular eruptions and eruptions which resemble exudative erythema multiforme. The individual crop of efflorescences is rarely monomorphic; usually several forms concur. The differential diagnosis is difficult. Attempts to culture the Brucella organisms from cutaneous blisters may fail because pus organisms grow more rapidly and thus obscure the Brucella organisms. Subcutaneous inoculation into guinea pigs may yield the organism. Brucellosis can be ascertained by cutaneous reaction. In the presence of suspicious cutaneous lesions in persons who have aided in the delivery of animals with Brucella abortus the cutaneous test is more reliable than the blood agglutination test. Vaccine has not proved effective in the treatment of cutaneous lesions of brucellosis. The author uses a sulfur-mercury

mixture locally and a pyrazole derivative internally. Protection of hands and arms with oils or with rubber gloves and disinfection of hands are valuable prophylactic measures.—[A. Schoch: Skin Lesions in Brucellosis, Praxia (Bern), Aug. 12, 1943. Abstr. in J.A.M.A. 125, (June 10, 1944): 457.]

Quinine No Longer a Necessity

Atabrine (= quinacrine hydrochloride. U.S.P.) is as good as quinine in the control of malaria and better in some respect according to a report from the National Research Council published in the Journal of the American Medical Association. "No advantage, and possibly disadvantage, would accrue to the armed forces were quinine or totaquine to replace quinacrine for the routine suppression and treatment of malaria" the resolution states. Moreover, the newly made laboratory quinine, lately announced, insures an ample supply of antimalarial drugs during and after the war. Furthermore, atabrine cures the malignant form of malaria known as falciparum which quinine does not do. - Abstract from Science News Letter.

Will Penicillin Cure Swine Erysipelas?

Heilman and Herrell, of the Mayo Clinic (Science News Letter, July 29, 1944), in having cured mice experimentally infected with Erysipelothrix rhusiopathiae with penicillin, make it reasonable to at least dream that a cure for swine erysipelas may be in the offing. Although the authors, according to the published report, had the human infection (erysipeloid) in mind, they mention its prevalence in swine as an additional indication of "the wonder drug." Out of 40 untreated mice experimentally infected, the mortality was 100 per cent, while among the same number treated with penicillin only 5 per cent died. Concluding, the authors declare that penicillin should prove effective in treating the disease in man and (quoting) "if it becomes practical, in swine, also."

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A good scheme for sabotaging the war effort is to buy War Bonds today and sell them next week.

Danger of Rabies Increasing

Throughout the country the reported increase of rabies in dogs is a cause of mounting concern. Control measures have been instituted in many areas, including parts of southern California, eighteen Michigan counties, St. Louis, the environs of Baltimore, and Newport, Ky. Reports from Indiana and the Bronx indicate an increase in the number of rabid dogs and of persons bitten by rabid dogs. If still more serious outbreaks are to be forestalled, such well known preventive measures as muzzling, incarceration and destruction of stray animals, and restraining of all owned dogs by leash will doubtless have to be undertaken in many other communities.—Current Comment. Aug. 26 (1944) issue, Journal of The American Medical Association.

Sodium Chlorate Poisoning in Cattle

A tenant, on moving from a farm about ten years ago, left behind a drum containing approximately 70 pounds of sodium chlorate. About two years ago, the next tenant, not knowing the poisonous nature of the contents, hauled the drum to a rubbish heap in the cow pasture. Recently, a third tenant turned his cattle into this pasture. The top of the drum had rusted through and exposed the contents.

One evening while riding the range, the owner discovered 16 head of dead cattle, some within a few hundred feet of this rubbish heap. On investigation, the remnant of the contents, about 30 pounds, was found. Held together by having absorbed water, it looked very much like common stock salt and distinctly showed that cattle had been licking it. To determine the nature of the contents, tiny lumps of the salt were ignited with matches and a chemical test was made at the high school laboratory.

The cattle were used to salt licks and one would have concluded that their craving for chlorate salts would not have been enough to cause poisoning. According to investigation by Dr. Ernest C. McCulloch of the State College of Washington, it takes about 500 Gm. of sodium chlorate to kill a cow.

The postmortem examination revealed the identical lesions described by Dr. McCulloch in the December, 1939, issue of the JOURNAL. In addition, the mucous membrane of the rumen in some of the cattle

was eroded as if cooked, and in others shreds of membranes were distributed with the contents of the rumen. The flesh was not as dark as described by Dr. McCulloch.

When the remainder of the herd was rounded up, one heifer showed a diarrhea and rise in temperature. As there is no known antidote for sodium chlorate, the heifer was treated with a large dose of bismuth subnitrate and sodium bicarbonate and turned out on the range. Twelve days later she had not fully recovered.—O. W. Johnson, B.S., D.V.M., Davenport, Washington.

Brucellosis Vaccines

Eight years ago a prominent British veterinarian remarked that, in his opinion, the high incidence of bovine brucellosis in Great Britain was due to the extensive use of live culture abortion vaccine. In this country, fifteen years ago there were stirring arguments and many debates over its detriment to the cattle-breeding industry. In 1930, following a report of controlled experiments by Torrey and Hallman, Michigan State College, the Executive Board of the AVMA forbade the editor of the JOURNAL to carry advertisements of that biological product and the Committee on Abortion, of the United States Live Stock Sanitary Association, recommended that its distribution be prohibited (J. A. V. M. A., April, 1930). Reliable investigators had found that the vaccines on the market varied from completely dead to highly virulent and that vaccinated cows had been caught shedding some of the latter sort in their milk. In 1940, after five years of controlled field tests, Chief John R. Mohler, of the United States Bureau of Animal Industry, announced the relative safety of strain 19 vaccine if employed at the proper time and place, and he laid down directives for its use. Thus, so-called calfhood vaccination was given into the hands of the veterinary profession minus adequate laws in the states to prevent its abuse. How many thousand of cattle were infected by vaccination before the coming of strain 19 will never be known, but to say that the figures are big is not entirely presumptuous, nor is it presumptuous now to warn veterinarians and their clients that the hit or miss use of strain 19 is not the answer to the brucellosis problem.

NUTRITION

MATERIAL FURNISHED BY THE COMMITTEE ON NUTRITION

Protein Reserves and Antibody Production

Reprinted from Nutrition Reviews (January, 1944)

ANTIBODIES are apparently specifically modified globulins. Since the synthesis of normal globulin results from the utilization of dietary protein [Madden and Whipple, Physiol. Rev., 20, (1940): 194] the probability exists that food protein also plays an important rôle in the production of antibody globulin. Several years ago Cannon [Nutrition Reviews 1, (1943): 186] advanced this hypothesis and summarized those observations in the literature which gave it support. He also stated that experiments in his laboratory showed that rabbits whose protein reserves had been reduced by plasmapheresis and a low protein diet were less able to produce antibodies than were normal animals. Detailed description of these experimental results have now been published [Cannon, Chase, and Wissler, J. Immunology 47, (1943): 133]. Their implication is so great that they should be reviewed more completely.

Three series of experiments were porformed, in each of which 16 rabbits were used. Half of the animals served as controls and were fed ad libitum a commercial rabbit food (Alpha Flakes) supplemented with 100 to 200 Gm. of carrots two or three times a week. This diet permitted young rabbits to grow normally and seemed to maintain good nutritional status of mature animals. The experimental rabbits were fed either carrots alone or, on alternate days, carrots and a synthetic ration composed of 37 per cent sucrose, 40 per cent corn starch, 3.5 per cent lard, 15 per cent "Ruffex" Fisher, and 4 per cent of a salt mixture. The synthetic diet contained only 85 mg. of nitrogen per 100 Gm. or a maximum of 0.5 per cent protein. No attempt was made to supplement the feedings with vitamins because the authors felt that circumstances which would cause men to consume a diet inadequate in protein also

usually provides a low vitamin intake; they wished to simulate these conditions. Daily, or on alternate days, 25 to 50 cc. of blood were removed from the left ventricle of those animals scheduled for plasmapheresis. After centrifugation the plasma was discarded, the red cells resuspended in Locke's solution and returned to the animal. In all, 150 to 200 cc. of plasma were removed, an amount equivalent to two or three times the total circulating protein. Determinations were made at regular intervals of the serum proteins, hematocrit, hemoglobin level, and red-blood cell count.

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In the first series of experiments, 16 young rabbits averaging 825 Gm. in weight and about 10 weeks of age were used. The 8 maintained on the low protein diet were fed 150 Gm. of raw carrots per day for twenty-four days. During this period, their weight remained practically stationary. For the next twenty-five days they were given first 200 Gm. and then 250 Gm. of carrots per day. After that, and for the duration of the experiment, they were given 200 Gm. of carrots and 100 Gm. of the synthetic ration on alternate days. At the end of sixtysix days, their weight was only slightly greater than it had been at the beginning of the period while the weight of the control group of animals had increased approximately two and a half times. An anemia had also developed in the low protein rabbits, and the average serum protein had fallen from an initial average value of 5.89 Gm. per 100 cc. to 4.37 Gm. The serum protein in the control group, meanwhile, had risen from 6.17 to 6.66 Gm. per 100 cc. On the sixty-sixth day each animal was injected subcutaneously with 0.2 cc. of an Eberth, typhosa vaccine. At intervals of four, eight, and twelve days thereafter, serum was obtained for titration of agglutinins against the homologous vaccine.

Average agglutinin output of the well-fed rabbits was about five times greater than that of the protein depleted animals.

The second series of experiments were conducted in an almost identical manner and comparable results were obtained. However, one week after the final titration of agglutinins to the typhoid vaccine had been made, each animal was injected intravenously with a vaccine of Salmonella paratyphi. The material was given intravenously because it was felt that a more uniform distribution of the antibody-producing system might thereby be produced. In this instance also, the average output of agglutinins was three to five times better in the control than in the depleted rabbits.

Adult rabbits were used for the third series because it was felt that dietary protein must be used by young animals partly for structural growth. When they are subjected to antigenic stimulation, therefore, a sort of competition might conceivably occur between the needs for growth and the needs for synthesis of globulin. With a limited protein intake, the production of antibody globulin could conceivably be hampered. Older animals would not be subject to this objection. Consequently, the protein reserves of 9 adult rabbits were depleted by plasmapheresis, by feeding the low protein diet, or by a combination of the two. Serum proteins varied in these animals at the end of the depletion period from 4.97 to 6.87 Gm. per 100 cc. The values for the control group ranged from 6.62 to 7.77 Gm, Even though the degree of protein depletion, as judged from values for serum portein, was not so great as in the first two series, the experimental animals produced less antibody globulin than the controls by a factor of 2.5 to 5.

These observations leave little doubt that, under the conditions of protein depletion produced, antibody formation is defective in the rabbit which is, immunologically, a very sensitive animal. However, since the diets used in these experiments were probably deficient in many nutrients other than protein, additional studies should be done in which all of the known essential nutrients except protein are provided in adequate amounts. The authors state that such experiments have already been started. The rôle of protein deficiency as the specific factor responsible for the poor synthesis of antibodies would be more definitely estab-

lished, furthermore, if young control animals were fed a high protein ration but only as many calories as were the young experimental rabbits so as to produce a comparable degree of malnutrition.

Nevertheless, as Cannon and associates point out, the serious food deprivations to which many people are subject during war usually are associated both with poor vitamin and poor protein intake. The greater incidence of infection and epidemics at these times, especially among civilian populations, "suggest the importance of famine and malnutrition as causes of decreased resistance." Antibody production is certainly an essential part of the body's defense against infectious disease. Demonstration of the importance of nutrition to the synthesis of antibody globulin is reason enough, from a practical point of view, for encouraging the plans for improvements in nutritional standards throughout the world.

It must be remembered that antibody response is not a measure of the resistance to infection—it implies that once infection has occurred bodily defenses are manifested to limit its extent—and that one part of these defenses is antibody production. Accordingly, the theory of protein intake and resistance to infection is not amply tested by antibody response alone.

Medical Licensure Statistics

During the year 1943, among 9,622 applicants who took state or national board licensure examinations in the United States, 931, or 9.7 per cent, failed. The highest percentage of failures was among graduates of unapproved medical schools or foreign medical faculties. Abridged, the tabulation* shows:

Schools A	pplicants	Passed	Failed	%
United States	. 7,611	7,503	108	1.4
Canada	. 84	72	12	14.3
Extinct schools	. 108	103	5	4.6
Unapproved school	s 757	466	291	38.4
Foreign faculties .	. 1,062	547	515	48.5
Totals	9 622	8 691	931	9.7

The actual number of licenses issued was 8,276, as some of the applicants had not completed their internship at the time of taking the examination. Licenses issued by reciprocity and endorsement were 2,302.

^{*}J.A.M.A., May 13, 1944.

EDITORIAL

Who's the More Competent Judge?

In the matter of free-for-all use of certain immunizing agents which, in unskilled hands, may produce disease instead of preventing it, in livestock production, the veterinary profession, in the people's behalf, assumes the rôle of expert witness and monitor, and does so on the ground that livestock sanitary science is a complex medical problem, involving the knowledge and experience derived from an established educational system. In the present sociopolitical setup, veterinarians are the sole experts in that field. They are the only competent judges that this period of our democracy has furnished to safeguard the production of meat and milk and leather against distintegrating agencies. If their testimony is ruled out on the ground of selfish interest, there is nothing competent to replace it. But, the fact that veterinary practice actually booms from the misuse of some vaccine and virus preparations, has at long last, disqualified that sort of unsupportable argument. One looks in vain through the pages of livestock history for lack of collective altruism on the part of the veterinary profession. On the contrary, there is no lack of proof that animal industry has been kept profitable through the steadfast application of veterinary science. On the other side, there is considerable evidence that free selling of agents intended to prevent disease is not famously philanthropic.

Wiley Memorial

In September, in New York City, the Division of Agricultural Chemistry, American Chemical Society, celebrated the centennial anniversary of the birth of Harvey W. Wiley who is remembered in the annals of the veterinary profession as the victim of his faith in pure food and drugs for the American people. Dr. Wiley was born at Kent, Ind., Oct. 18, 1844, and served as chief chemist for the United States Department of Agriculture from 1883 to

1912, the last six years as chief of the service now known as the Food and Drug Administration, which was created through his urge by Act of Congress in 1906. He is remembered in our circle as one of the backers of federal meat inspection, as an uncompromising advocate of pure food and drugs, and as a fighter against fraud in their production—a dangerous practice for a public official in those days (if not also now). Anyhow, Wiley was relegated to private life after six years of trying to purify the American's dietary and pharmacy. His efforts aroused storms of nasty opposition few men in public office have had to endure. One guess as to whence came the smearing.

The memorial at the meeting in September was a symposium on his "official biography" by prominent figures in the field of nutrition who now pause with uncovered heads to honor a man and his teaching which received scant open tribute during his tenure in the governmental service. In our circle, Wiley's light was never dim and it has shone brighter and brighter as the veterinarians' objective became more clear in the people's perspective -as impure food and under-nourishment came gradually into the limelight. To us, Wiley is the man of the USDA who dared -come what may—to point out the frauds of food production, which the American people had too long tolerated unheeded. The Wiley memorial, if a sign that matters in this connection are improving, is also a signal that much remains undone.

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The first hundred years are the hardest. The Wiley memorial symposium of 2044 should be better understood. Dub this as you may, the fact remains that the human being of '44 is not as famously health conscious as Moses (1571-1451 B.C.). Like many another crusader, it is Dr. Wiley's fate to have his advocacy of public health celebrated only after his demise and then in the seclusion of a scientific society.

The European corn borer caused a loss of \$33,000,000 to the 1943 corn crop in northeastern United States alone.

Claude Henry Case 1880-1944

Dr. C. H. Case, 64, Akron, Ohio (O.S.U. '04), one of America's foremost veterinarians, died suddenly at the Dearborn Station, Chicago, Aug. 27, 1944, while about to entrain for home after attending the AVMA meeting and visiting relatives. Obviously, his death was caused by the heart



Dr. C. H. Case

affection which had cruelly undermined his health for several years.

Physically, Dr. Case is best described as six-foot-plus athlete—onetime tackle of the O.S.U.—and professionally, as a clinical pathologist of the upper bracket in the lairy branch of veterinary medicine. In he association circle, he will long be renembered as a prominent figure on the rograms of many meetings, conferences, and clinics where his impressive talks and emonstrations cut patterns for successful ractice in that field. His colorful success peaks for the advantage of graduate inernship prior to entering practice, which vas emphasized in the recent presidential ddress of Dr. Charles W. Bower. After raduating. Dr. Case spent a year under he tutorship of Prof. W. L. Williams at ornell to qualify, and his classmate, Dr. .F. Planz, went to Europe for the same urpose. Thus, two young men capable of naking brilliant history in clinical veteriary medicine established one of the largest practices in America in a congested industrial and farming center, rich in opportunity for men well grounded.

Painstaking effort to expound the meticulous details of his experiences in the field, during the evolutionary period of bovine medicine and milk hygiene, stands out in the professional career of the deceased as a service backed by preparedness, knowledge, experience, opportunity, and the will to teach his colleagues. One traces much of the early fling at milk hygiene in the industrial cities and farms of northern Ohio to the ambition of Dr. Case.

From Dr. L. W. Goss of the O.S.U. staff comes a reminder that the deceased served as president of the Ohio State Veterinary Medical Association in 1921, and as a member of the Board of Visitors of the Ohio Alumnae Association, and that Mrs. Case. who survives him along with a son, two sisters, and a brother, has served as a member of the Board of Education of Akron. In the annals of the AVMA, Mrs. Case is on record as a founder of the Women's Auxiliary and its president for a number of consecutive terms. Dr. Goss adds: "Dr. Case's services will be greatly missed by the livestock industry and his fund of knowledge from his broad experience has been of great value to the veterinary profession.'

Sorrowfully, the veterinary profession says adieu to a towering figure on every score.

Angora Rabbits and Disabled Veterans

Dr. Ira N. Gabrielson, of the Fish and Wildlife Service, has recommended the raising of Angora rabbits as a profitable occupation for disabled veterans, pointing out that there is a critical shortage of Angora rabbit fur since the war stopped importations from England, France, and Japan. The domestic output (American) is 50,000 pounds annually, the best grades selling for \$10 a pound. Postwar opportunities in this field are pronounced excellent in the United States.

Morale is what keeps you going when your feet say you can't.

CURRENT LITERATURE

ABSTRACTS

Wild Feedstuffs: Their Chemical Composition

The authors made critical studies of 120 wild American plants as to their content of crude protein, true protein, nonprotein nitrogen, crude fiber, nitrogen-free extracts (carbohydrate), fat, ash, calcium, phosphorus, and moisture at the time examined, and tabulated the data along with the time and place of collection, the part of the plant analyzed (seed, pod, hull, fruit, kernel, pulp), popular name, and botanical classification. Owing to increasing interest in wildlife, and obvious importance in the case of shortage of feedstuffs for livestock and poultry. this research on the nutritive value of wild plants as measured by chemical composition fills a gap in the literature on animal nutrition. The methods set down by the Association of Official Agricultural Chemists were followed and the work was conducted by chemists of the Bureau of Animal Industry, USDA, and the Fish and Wildlife Service, USDI, at the Beltsville Research Center and Virginia Polytechnic Institute.

Of the specimens analyzed, the pulse family (Leguminosae) furnished 20; the Beech family (Fagaceae), 13; the grass family (Gramineae), 15; the rose family (Rosaceae), 7, and the remainder scattered among the Polygonaceae (buckwheat), Compositae (ragwed), Rubiaceae (madder), Balsaminaceae (touch-menot), Betulaceae (hazelnut), Pinaceae (pines), Hamamelidaceae (witch-hazel), Berberidaceae (barberry), Rhamnaceae (plum), Anacardiaceae (sumac, skunkbush), Ebenaceae (persimmon), Caprifoliaceae (honeysuckle), Liliaceae (saw brier), Uticiaceae (mulberry, hackberry), Elaeagnaceae (Russian olive), Oleaceae (privet), Myricaceae (bayberry), Vitaceae (grape, frost), and Cyperaceae (chufa), each with one or more genera and species.

The samples were gathered from widely separated sections of the Middlewest, East, and South during 1939 and 1940 by workers of the Fish and Wildlife Service, Soil Conservation Service, Tennessee Valley Authority, and the senior author.

Mention is made of similar, but less comprehensive, studies in this country and Germany. Among the 13 references is the work of Hart, Guilbert and Goss on wild forage in California (1932) and of Wainio and Forbes on forest fruits and nuts in Pennsylvania (1941).—

[Thomas R. King and Harold E. McClure, Animal Husbandry Division, Bureau of Animal Industry, Agricultural Research Administration, U. S. Department of Agriculture: Chemical Composition of Some American Wild Feedstuffs, J. Agric. Res., 69, (July 1, 1944): 33-46.]

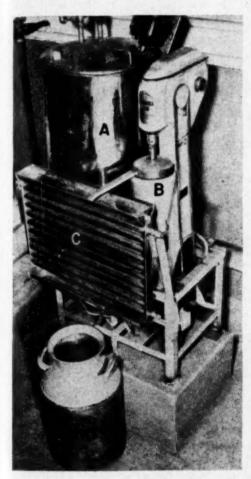
Achievements of the Uganda Veterinary Service

All that should be needed to stress the importance of a classical veterinary service in this day and age, particularly in the postwar planning period that will be required to pay off the war debts, is to point out what veterinary medicine has accomplished in Uganda where, in a few short years, it transformed that Central African colony into a highly productive area by reforming animal production among the natives. Besides supplying a vast amount of hides, meat, and milk for British troops and civilians, prisoners of war, refugee camps, and public laborers, the veterinarians of Uganda have built up a spirit of cooperation between government functionaries and natives by teaching and demonstrating the virtues of disease control among farm animals, duplicating the labors of Sir Arnold Theiler in the Union of South Africa which removed the obstacles to the development of that nook of the world years ago. By controlling rinderpest and other epizoötic diseases, establishing markets, aiding the natives in disposing of their oldest and poorest stock, and encouraging better housing. clothing, sanitation, and education of children, the British veterinarians have been able to transform Uganda to a highly productive livestock colony. Thousands of British troops and civilians, the author declares, are walking on Uganda leather as a result of the cooperation developed among the native stock owners. Now, over one million hides, compared with 20. 000 in 1936, go out of Uganda annually. More than 500,000 lb. of ghee, thousands of plow oxen and neat cattle for the canneries, and sanitary dairies springing up in most of the townships illustrate, by contrast with the for mer situation, the fundamentality of veterinary service in human affairs. Permanency of the reformation is provided for by training Africal assistants to run their own dispensaries and treat minor ailments .- [R. J. Simmons, En

tebbe, Uganda, Central Africa: Veterinary Science Works Modern Miracle in Uganda. Vet. Med. 39, (Sept. 1944): 336-338.]

Septic Sore Throat from Powdered Milk

That milk is an ever-ready medium for the propagation of pathogenic organisms was demonstrated when an outbreak of septic sore



-From J.A.M.A. April 22, 1944

Machine used by the armed forces to reconstitute powdered milk. A—Mixing tank; B—high speed emulsifier; C—cooler. The powder is mixed with the water at 80 F., agitated for five minutes, and then heated to 145 F. and held there for twenty minutes. After adding the stated amount of sweet cream unsalted butter, agitation is continued for another ten minutes at 145 and then cooled to 38 F.

throat, involving 10 per cent of the personnel of a given naval station, was traced to the "mechanical cow," used by the armed forces for liquefying powdered milk. Throat cultures

the

proved to be practically pure cultures of beta hemolytic streptococcus as were also cultures from the reconstituted milk and scrapings from the machine. All other sources (swimming pool. sleeping quarters, mess hall, etc.) were exonerated, except the dairy which had defects that might have accounted for the contamination. Eventually, the probable source was traced to one of the handlers of the machine whose throat was positive for beta hemolytic streptococci. The objective of the article is to indicate a new source of septic sore throat-the machine used to reconstitute powdered milk which, like other utensils and machines, are capable of transmitting disease, and endangering the health of military personnel. Detailed direction for operating the "mechanical cow" and sterilizing all of its parts are given. machine is manufactured by the United Dairy Company, West Chester, Pa.-[Lieutenant Ralph F. Allen, (M.C.), U.S.N., and Lieutenant Louis S. Baer, (M.C.), U.S.N.R.: Outbreak of Septic Sore Throat Due to Reconstituted Poucdered Milk. J.A.M.A., 124, (April 22, 1944): 1191-1193.]

Effect of Low Barometric Pressure on Sheep

Sheep were experimentally exposed at normal temperature to pressures equivalent to 31,000, 36,000, 40,000, and 46,000 feet altitude in an atmosphere of oxygen. The number of exposures ranged from 1 to 16. The intervals between the fatal exposure and the one immediately preceding were one to fourteen days. All but one of the sheep died after one or more trials. The sheep killed for examination had survived 13, two-hour exposures at simulated altitudes of 36,000 and 40,000 feet. The autopsies were performed immediately after death. Four classes of lesions were found: (1) air emboli, (2) epicardial and endocardial hemorrhages, (3) effusions in the serous cavities, and (4) contraction of the spleen, all in the same animals. The emboli were widely scattered: brain, heart, diaphragm, jugular, mesenteric, portal, perirenal, and subcutaneous vessels. The heart hemorrhages were petechial of varying extent, the splanchnic effusions were of clear fluid. The spleen was small in all of the sheep. Obviously, the hemorrhages were due to increased cardiac effort .- [John W. Miller, Surgeon, U. S. Public Health Service: Pathologic Changes in Sheep Resulting from Exposure to Low Barometric Pressures. Pub. Health Rep. 59, (May 12, 1944): 618-620.]

Plant Life Endangered by War

The difficulty of preventing plant plagues from becoming implanted in this country has been intensified beyond the control of the usual quarantine regulations through the great volume of packages mailed by service men in various parts of the globe. A fragile gift wrapped in raw cotton, for example, is capable of importing the destructive pink bollworm to the cotton plantations of this country. This is but one among many similar risks of the present far-flung war, according to H. B. Petty, extension entomologist, Illinois State Natural History Survey. —From Oak Leaves, July, 1944, Oak Park, Ill.

BOOK NOTICES

Atlas of Avian Anatomy, Osteology, Arthrology, and Myology

Coming as it does with the mounting interest in poultry production, this atlas is proof that the anatomist is not slumbering while the pathologist carries on. Although scattered blossoms of somatic avian anatomy have bloomed here and there, as poultry pathology claimed attention in the fields of research and practice, foreign language anatomies had to be searched for the details Michigan State College now puts in our lap—in so far as osteology, arthrology, and myology are concerned. "An amazing piece of work" is the reaction from cover to cover, from first to final analysis of its contents.

The author adopted the terminology set down by the American Veterinary Medical Association a few years back under the guidance of Septimus Sisson of The Ohio State University, but admits getting into deep water in naming certain structures of the manus, crus, and cervix, meaning that old as birds of the basse-cour are in the literature, anatomical, like pathological, terms for domestic fowl have yet to be standardized.

The book has 49 pages of descriptive material and 97 pages of black and white plates of utmost excellence. None would gainsay that this is a chef d'oeuvre as far as it goes into the science of avian anatomy. The genera Gallus, Anser, Pavo, and Cygnus, within the bournes mentioned, are described comparatively in minute details, with Gallus as the structural type. American veterinarians will be proud of this work, and poultrymen should be impressed with their collaboration when poultry literature of this type is placed at their disposal.

There are two criticisms to register here. The name of genera are not common nouns. And why, unnecessarily, publish a book that does not fit, standing up, into the average shelves of the average library. The over-all dimensions are 13 3/4 by 10 1/2 inches, although it contains no picture that could not have been printed "as is" on pages of popular size. Believe it or not, over-sized books are prone to land at the bottom of forgotten drawers or storeroom

shelves, all covered up with office or household dross. Sure as "shootin" there is a practical side to book publishing. Because geographers have to use a lot of space to get details in is no reason to "atlasefy" a collection of scientific pictures to no good purpose.

But, make no mistake, Chamberlain has given us an atlas organized along well-defined lines which fills a gap in basic veterinary knowledge.

—[Atlas of Avian Anatomy, Osteology, Arthrology, Myology, By F. W. Chamberlain, Professor of Anatomy, Michigan State College. Cloth. Atlas type. 145 pages. Hallenbeck Printing Company, East Lansing, Mich. 1944. Price, \$2.50.

Manual of Human Protozoa

The material is oriented in three classes: protozoan parasites of the digestive tract, of the circulatory system, and of the muscles and reproductive organs, a classification quite appropriate for the study of unicellular parasites of animals. Among the more familiar ones included are Balantidium coli, a common inhabitant of the digestive tract of swine (Hagan, Ray); Trypanosoma gambiense, specific agent of African sleeping sickness which is related to tsetse fly infection of the same genre in cattle; Leishmania donovani which causes the infective protozoal disease, canine leishmaniasis, as well as human kala-azar; Plasmodium malariae, the ubiquitous organism responsible for worldwide presence of quantan malaria; and Entamoeba histolytica of human amebic dysentery. In all, 14 pathogenic Protozoa are described with respect to their pathology, techniques for detection and identification, their carriers, and residential habits in and out of the living body. Organisms of the genus Spirochaeta are not included. This manual is essentially a guide to the diagnosis of human protozoal diseases with casual mention of their animal hosts.-[Manual of Human Protozoa. By Richard R. Kudo, D.Sc., Associate Professor of Zoölogy, University of Illinois. Illustrated. Cloth. 125 pages. Charles C. Thomas, Springfield, Ill. 1944. Price, \$2.00.]

The Evolution of Tuberculosis

There is a magnetism in books on tuberculosis coming from the Land o' Lakes, for it was here where veterinarians first ganged up against that disease in farm animals. It was also in Minnesota where the medical profession first aided in molding public opinion in favor of the veterinarian's task in that connection, not to mention the more recent studies of the techniques and results which the author has found applicable in principle to the extermination of tuberculosis in human beings. The book in hand is, therefore, more than just so many more pages on the

white plague. It is a friend packed with usable information based on twenty-one years of observation and painstaking effort, unswayed by personal prejudice or previous opinion. The text, in effect, is a clinical report on the work at the Lymanhurst Health Center of Minneapolis, where the mortality of tuberculosis was reduced from 108.9 to 28.4 per 100,000 during the same twenty-one years. How that remarkable decrease was accomplished is, in fact, the context of this book. Assuredly, the fighters against man's worst enemy will not miss a line. Remarkable is the changing idea of making a distinction between tuberculosis per se and tuberculous infection, so long entertained in medical literature and long since disregarded in veterinary medicine, where a tuberculin reaction is known, through millions of autopsies, to point the finger to a tuberculous lesion, at some place to be found-all right, then, just "a first infection tuberculosis" but nevertheless of unknown or uncomputable potentiality. There is a contrast between the veterinarian and his myriad autopsies and the physician waiting for some tuberculin-positive patient to die, perhaps, from some other disease, in order for a postmortem study to be made. Anyhow, getting rid of the lesion along with the animal has worked and, of course, would work for the physician, if. . . .

There is much to praise in the way the capable physician goes about making a diagnosis of "first infection tuberculosis" through the gradual stages of clinical signs, the way the progress of the tuberculous process is curtailed, the classical measures of prevention, and diminishing mortality. Mankind owes much to what this book teaches, a masterpiece of clinical reports by an observing author—[The Evolution of Tuberculosis. By J. Arthur Myers, M.D., Director of Tuberculosis Activities, Lymanhurst Health Center, Minneapolis. Paper. 255 pages. Price not given.]

Fourteenth Report to Congress on Lend-Lease Operations

This is a booklet of 83 pages by Leo T. Crowley, administrator of the Foreign Economic Administration, containing a full report of an expenditure of \$19,986,000,000 up to Dec. 31, 1943, for so-called lend-lease materiel and of reverse lend-lease from New Zealand, Australia. India, Russia, and the United Kingdom, all-inall a romance in war financing without parallel in the world's history. The book is important to the veterinary profession for the tables and charts containing figures of the vast amount of farm products that have changed hands in the operation of the mutuality. A good book to file for comparison with coming editions. Obviously procurable on request, to the FEA, Washington, D. C.

The American Illustrated Medical Dictionary

We recommend the dictionary universally called "Dorland's," because it more nearly exterminates the archaic lexicography of veterinary terms than the mine run of medical dictionaries. Although not completely snow white in that respect, critiques in this column have to be tempered with kind words, regardless. There is no veterinary-medical dictionary. What we get is net gain through no effort of our own. Veterinarians have never sat at the round table with lexicographers as they do with the writers of the United States Pharmacopoeia, for example, to delete the teachings of long ago. To ride roughshod over the excellent medical dictionaries now published is looking the gift horse in the mouth, even though little has ever been planned to bring the vocabulary and definitions of veterinary terms up-to-date. The loss has been mutual. Nineteenth century veterinary pathology was retained by medical dictionaries for so many years that they were not habitually sought by veterinarians for current knowledge. Dorland has caught up with most of these sore spots and healed them, but speaking in general, it took a long, long while to get Salmon's hog-cholera bacillus, the bacillary cause of canine distemper, and old cornstalk disease with its Bacillus zeae out of the medical dictionaries, to mention but three of these sore places. Every medical dictionary we attempt to review is a reminder that human and veterinary medicine ought to work in double harness part of the time in the interest of mankind. That these million-dollar diseases of livestock and their strange ways in the biological world are entitled to the medical lexicographer's attention is the reason. veterinary profession remains ever open for an invitation to come in and help iron out the infelicities. Half an hour's interview with any animal pathologist would do the trick.

This dictionary is excellent typographically and topographically, leans away from good grammar only as custom directs, and is practically unabridged. He who buys a "Dorland's" will not be disappointed.—[The American Illustrated Medical Dictionary. By W. A. Newman Dorland, A.M., M.D., F.A.C., Lt. Col. M.R.C., A.U.S., member of the Committee on Nomenclature and Classification of Diseases, American Medical Association, with the collaboration of E. C. L. Miller, M.D., Medical College of Virginia. 1668 pages. Illustrated. Stiff or flexible covers. W. B. Saunders & Company, Philadelphia. 1944. Price: plain, \$7.00; thumb indexed, \$7.50.1

American public libraries loan 450 million books annually.

THE NEWS

New Executive Board Chairman

At the annual session of the Executive Board held during the 81st annual meeting, Dr. W. A. Hagan, Ithaca, N. Y., was elected chairman, succeeding Dr. O. V. Brumley, Columbus, Ohio.



Dr. W. A. Hagan

The latter terminated nearly 15 years of continuous service to the Association as an elective officer, having represented district 10 (Ohio and Michigan) from 1930 to 1936, was president-elect and president, respectively, in 1937 and 1938, and was returned to the Executive Board for a second term (1939-1944), being chairman for the past four years.

The new chairman needs no introduction to AVMA members and the veterinary profession at large. On leave of absence from New York State Veterinary College, Dean Hagan has been serving during the past year as Special Consultant to Chief A. W. Miller, Bureau of Animal Industry, U. S. Department of Agriculture, and will return to his faculty duties at Cornell on Nov. 1, 1944.

He joined the AVMA in 1916 and has served at various times on a number of committees, notably the Committee on Education since 1938. In 1942, he was elected to fill an unexpired term in district 9 (New York and New England) of the Executive Board and was subsequently reelected for a full term of five years. Dean Hagan's broad knowledge of the problems facing veterinary science, the veterinary profession, and the whole veterinary service, qualifies him most highly for his responsible position in heading up the AVMA executive organization.

APPLICATIONS

The listing of applicants conforms to the requirements of the administrative by-laws—Article X, Section 2.

First Listing

ALMANZA, REYES HERNANDO
P. O. Box 86, East Lansing, Mich.
V.M., Universidad Nacional, Colombia, 1942.
Vouchers: C. F. Clark and F. Thorp, Jr.

Baber, J. B.
Stockton, Ill.
D.V.M., Indiana Veterinary College, 1916.
Vouchers: E. R. Kennedy and G. B. Munger.

Barlow, W. W. 7929 Calumet Ave., Chicago, Ill. D.V.M., Alabama Polytechnic Institute, 1933. Vouchers: M. J. Romine and W. G. Reed.

Beagle, Arthur G.
Box 434, Norfolk, Neb.
D.V.M., Kansas City Veterinary College, 1918.
Vouchers: J. E. Peterman and J. W. Murdoch.

BLOHM, FRANK D. Hubbard, Iowa. D.V.M., Iowa State College, 1932. Vouchers: E. A. Benbrook and M. W. Sloss.

Brand, R. W.
609-3rd Ave., Longmont, Colo.
D.V.M., Colorado State College, 1928.
Vouchers: I. E. Newsom and K. W. Smith.

Bugbee, Clinton H.
1738 W. Van Buren St., Phoenix, Ariz.
V.S., Ontario Veterinary College, 1897.
Vouchers: W. R. Lee and V. Mikkelson.

CROWELL, RAIPH H.
6754 Normal Blvd., Chicago 21, Ill.
D.V.M., Kansas City Veterinary College 1913.
Vouchers: M. J. Romine and W. G. Reed.

DEWAR, JOHN K. 207 N. Eleventh St., Cherokee, Iowa. D.V.M., Iowa State College, 1930. Vouchers: I. W. Moranville and G. B. Munger.

DONNELL, LLOYD

242 W. 70th St., Chicago 21, Ill.

D.V.M., Indiana Veterinary College, 1918.

Vouchers: M. J. Romine and G. M. Smith.

DOTY, C. J. 625 S. Canal St., Carlsbad, N. Mex. D.V.M., Kansas State College, 1928. Vouchers: F. L. Schneider and L. E. Patton.

- GIBSON, J. G.
 - P. O. Box 1015, Florence, S. Car.
- D.V.M., University of Georgia, 1933.
- Vouchers: L. C. Merritt and G. R. Kitchen.
- GIVENS, CRAIG B. JR.
 - Box 407, Tazewell, Va.
 - D.V.M., Alabama Polytechnic Institute, 1941. Vouchers: P. Graves and J. E. Greer.
- GREENHOFF, GARNER R.
- 142 Marathon Ave., Dayton, Ohio.
- D.V.M., Ohio State University, 1937.
- Vouchers: D. E. Trump and A. G. Madden.
- GRIEBIE, K. E.
- Brownton, Minn.
 - D.V.M., Iowa State College, 1943.
- Vouchers: R. A. Penkert and L. M. Skamser.
- HAMMERMEISTER, RUSSELL W.
 - Rt. 1, Worthington, Ohio.
 - D.V.M., Ohio State University, 1938.
 - Vouchers: W. F. Guard and J. D. Grossman.
- HERTICH, C. D.
- 1916 Swanwick St., Chester, Ill.
- D.V.M., Iowa State College, 1941.
- Vouchers: A. E. Bott and J. P. Torrey.
- HOBART, C. DOUGLAS
- 509 Market St., Cheraw, S. Car.
- V.M.D., University of Pennsylvania, 1942.
- Vouchers: R. A. Mays and F. P. Caughman, Jr.
- JONES, F. B.
- 204 Federal Bldg., Topeka, Kansas.
- D.V.S., Kansas City Veterinary College, 1911. Vouchers: W. W. Wempe and G. A. Rathman.
- KINGMA, FRED J.
 - 121 E. Weber Rd., Columbus 2, Ohio.
 - D.V.M., Ohio State University, 1938.
- Vouchers: R. E. Rebrassier and P. A. Soldner.
- KOCHENDORFER, FRANK C.
- 702 Center Ave., Decorah, Iowa.D.V.M., Chicago Veterinary College, 1918.
- Vouchers: G. B. Munger and I. W. Moran-
- KOCHER, W. E.
- 109-11th Ave., N., So. St. Paul, Minn. D.V.M., Chicago Veterinary College, 1913.
- Vouchers: F. W. Hansen and I. O. Buring-
- ton.
- LAUTS, A. E.
- P. O. Box 114, 113 Maple St., Gordon, Neb.
- D.V.M., Kansas State College, 1928.
- Vouchers: J. E. Peterman and J. W. Murdoch.
- McFerrin, R. E.
 - Greenville, Ala.
 - D.V.M., Alabama Polytechnic Institute, 1944.
- Vouchers: I. S. McAdory and E. S. Winters.
- McMurray, Arthur A.
- P. O. Box 12, Athens, Tenn.
- D.V.M., Ohio State University, 1924.
- Vouchers: D. Coughlin and H. W. Hayes.

- OROZCO, GUTIERREZ BENJAMIN
 - Agustin Rivera No. 21, Lagos de Moreno, Jal., Mexico.
 - M.V., Escuela Nacional de Medicina Veterinaria, 1940.
 - Vouchers: Fernando Camargo N. and G. L. Delgado.
- PARRISH, CHARLES
 - 1102 State Office Bldg., Richmond, Va.
 - D.V.M., St. Joseph Veterinary College, 1916.
 - Vouchers: H. S. Miller and H. C. Givens.
- POTTLE, LESLIE G.
 - 1452 Vermont, Quincy, Ill.
 - D.V.S., Kansas City Veterinary College, 1908. Vouchers: D. F. Luckey and A. E. Bott.
- PRICE, L. O.
 - Blacksburg, Va.
 - D.V.M., Indiana Veterinary College, 1915.
 - Vouchers: I. D. Wilson and R. D. Hatch.
- QUILLIN, CLYDE R.
- P. O. Box 342, Smithfield, Va.
 - B.V.Sc., Ontario Veterinary College, 1924.
- Vouchers: E. P. Johnson and I. D. Wilson.
- SCHMIDT, FREDERICK F.
 - 1104-23rd St., Douglas, Ariz.
 - D.V.M., Kansas State College, 1932.
 - Vouchers: J. B. McQuown and E. R. Frank.
- SHELTON, JOHN T.
 - Buncombe, Ill.
 - D.V.M., McKillip Veterinary College, 1918.
 - Vouchers: W. C. Glenney and C. C. Hastings.
- SMITH, JOHN W.
 - Lebo, Kansas.
 - D.V.S., Kansas City Veterinary College, 1909. Vouchers: M. P. Schlaegel and C. W. Bower.
- STALNAKER, H. B.
 - Edgewood, Iowa.
 - D.V.M., Iowa State College, 1932.
 - Vouchers: G. B. Munger and I. Dunn.
- STEVER, DONALD W.
- 801 Walnut St., Hollidaysburg, Pa.
- V.M.D., University of Pennsylvania, 1937.
- Vouchers: A. H. Craige, Jr. and E. T. Booth.
- SUTER, R. J.
- 1113 North Ave., Waukegan, Ill.
- D.V.M., Indiana Veterinary College, 1921.
- Vouchers: C. L. Miller and O. Norling-Christensen.
- URBANEK, GEORGE M.
 - 6320 Broadway, Chicago, Ill.
 - D.V.M., Chicago Veterinary College, 1912.
 - Vouchers: H. P. Hoskins and L. A. Merillat.
- WEITZ, WILLIAM L.
 - 3921 Main St., Eggertsville 21, N. Y.
 - D.V.M., Cornell University, 1930.
 - Vouchers: D. D. Ford and C. N. Bramer.

WRIGHT, R. H.

43 King St., Dundas, Ontario, Can. B.V.Sc., Ontario Veterinary College, 1938.

Vouchers: A. E. Cameron and J. A. Campbell.

ZIEROLD, REYES PABLO

Juarez No. 40, Tialnepantla Edo. de Mexico, Mexico.

D.V.M., Escuela Nacional Veterinaria, Mexico, 1939.

Vouchers: Fernando Camargo N. and J. R. Robb.

Second Listing

Alder, J. L., Athol, Kansas.

Bartolett, Harry F. B., Park Ave., Freehold, N. J.

Caldwell, George H., P. O. Box 408, Yerington, Nev.

Hoylman, Adger A., 426 W. 62nd St., Chicago, Ill.

Howe, Ivan G., New York State Dept. of Agriculture and Markets, State Office Bldg., Albany, N. Y.

Knowles, Jack O., Station Hosp., Fort Worth Army Air Field, Fort Worth, Texas.

Penwell, Park H., 15 Port-Mobile—T.C., APO 507—c/o P.M., New York, N. Y.

Tregileus, T. C., Sibley, Iowa.

Walter, M. L., 1016 N. Cumberland, Knoxville, Tenn.

Watkins, Robert R., Prisoner of War Camp, Clarinda, Iowa.

1944 Graduate Applicants

First Listing

The following are graduates who have recently received their veterinary degrees and who have applied for AVMA membership under the provision granted in the Administrative By-Laws to members in good standing of junior chapters. Applications from this year's senior classes not received in time for listing this month will appear in later issues. An asterisk (*) after the name of a school indicates that all of this year's graduates have made application for membership.

Alabama Polytechnic Institute*

BACKSMAN, A. L., D.V.M.

610 23rd Ave., N., St. Petersburg, Fla.

Vouchers: E. S. Winters and O. E. Jung, Jr.

BARBER, R. LESLIE, D.V.M. Box 709, Auburn, Ala.

Vouchers: B. F. Cox and J. K. MacNamee.

BASS, RAYMOND L., D.V.M.

Kissimmee, Fla.

Vouchers: B. F. Cox and J. K. MacNamee.

BRAWNER, W. REUBEN, D.V.M.

Waverly, Ala.

Vouchers: B. F. Cox and J. K. MacNamee

CANON, F. W., D.V.M.

1402 St. James Court, Louisville, Ky.

Vouchers: E. S. Winters and O. E. Jung, Jr.

CARNEY, J. P., D.V.M.

8th St. Road, Meridian, Miss.

Vouchers: E. S. Winters and J. K. MacNamee.

CARTER, EDWARD, D.V.M.

Skipwith, Va.

Vouchers: B. F. Cox and J. K. MacNamee.

COFER, GEORGE W., D.V.M.

Box 34, Wagener, S. Car.

Vouchers: B. F. Cox and J. K. MacNamee.

COOPER, IRVEN R. JR., D.V.M.

Allendale, S. Car.

Vouchers: I. S. McAdory and E. S. Winters.

COTTLE, LAWRENCE W. JR., D.V.M.

410 St. Charles Ave., Montgomery, Ala.

Vouchers: B. F. Cox and J. K. MacNamee.

Cox, Erston S., D.V.M.

Blountsville, Ala.

Vouchers: E. S. Winters and O. E. Jung, Jr.

CRESPO, VICTOR, D.V.M.

P. O. Box 520, San Jose, Costa Rica, C.A. Vouchers: B. F. Cox and J. K. MacNamee.

DAVIS, JAMES A., D.V.M.

417 E. Jerger St., Thomasville, Ga.

Vouchers: B. F. Cox and J. K. MacNamee.

DAVIS, JAMES J., D.V.M.

1119 Sixth Ave., Gadsden, Ala.

Vouchers: E. S. Winters and J. K. MacNamee.

DUFFELL, GORDON L., D.V.M.

Forysth, Ga.

Vouchers: E. S. Winters and W. S. Bailey.

FIEVET, CHARLES E., D.V.M.

Rt. No. 1, Box 87, Bessemer, Ala.

Vouchers: E. S. Winters and O. E. Jung, Jr.

GRAHAM, OSWALD H., D.V.M.

Tarboro, N. Car.

Vouchers: J. K. MacNamee and E. S. Winters.

GRANT, W. RAY, D.V.M.

Wedowee, Ala.

Vouchers: E. S. Winters and W. S. Bailey.

HINES, FLEETWOOD, D.V.M.

Darlington, Ala.

Vouchers: B. F. Cox and J. K. MacNamee.

HOFFMEYER, T. P., D.V.M.

Rt. No. 2, Florence, S. Car.

Vouchers: E. S. Winters and O. E. Jung, Jr.

HOLLINGER, SHANNON R., D.V.M.

Camden, Ala.

Vouchers: I. S. McAdory and E. S. Winters.

HOWARD, THOMAS J., D.V.M.

Leesburg, Va.

Vouchers: E. S. Winters and O. E. Jung, Jr.

- JOHNSTON, W. L., D.V.M.
 - Fairfield, Ala.
 - Vouchers: E. S. Winters and O. E. Jung, Jr.
- JONES, ROBERT L., D.V.M.
 - Renfroe, Ala.
 - Vouchers: B. F. Cox and J. K. MacNamee.
- KING, ROLAND, D.V.M.
 - Rupert, Idaho.
 - Vouchers: B. F. Cox and J. K. MacNamee.
- KNOWLES, ROBERT P., D.V.M.
- 2934 N. W. 17th Ave., Miami, Fla.
- Vouchers: B. F. Cox and J. K. MacNamee.
- McLean, Clipton C., D.V.M.
 - Eagle Springs, N. Car.
 - Vouchers: E. S. Winters and J. K. MacNamee.
- NANCE, HAROLD W., D.V.M.
- 151 Cox St., Auburn, Ala.
- Vouchers: E. S. Winters and O. E. Jung, Jr.
- PHILLIPS, ROBERT B., D.V.M.
 - Rt. "C," Cordele, Ga.
 - Vouchers: B. F. Cox and J. K. MacNamee.
- PORTER, RALPH W., D.V.M.
- 216 Genelda Ave., Quincy, Fla.
- Vouchers: I. S. McAdory and J. K. MacNamee.
- RAULSTON, GILBERT L., D.V.M.
 - Trenton, Ga.
 - Vouchers: B. F. Cox and J. K. MacNamee.
- RAWLINSON, WILLIAM F., D.V.M.
 - Manning, S. Car.
- Vouchers: E. S. Winters and O. E. Jung, Jr.
- REISINGER, R. C., D.V.M.
- 148 N. E. 57th St., Miami, Fla.
- Vouchers: B. F. Cox and J. K. MacNamee.
- RIDDLE, HERBERT E., D.V.M.
 - Box 228, Marietta, Ga.
- Vouchers: E. S. Winters and O. E. Jung, Jr.
- RODGERS, L. D., D.V.M.
 - Kingstree, S. Car.
 - Vouchers: E. S. Winters and J. K. MacNamee.
- SCHAFFER, J. DAVID, D.V.M.
 - Manchester, Md.
- Vouchers: E. S. Winters and J. K. MacNamee.
- SIKES, DENNIS, D.V.M.
- Cobbtown, Ga.
- Vouchers: E. S. Winters and O. E. Jung, Jr.
- STERRETT, ROBERT H., D.V.M.
- 175 W. Glenn, Auburn, Ala. Vouchers: O. E. Jung, Jr. and I. S. McAdory.
- TAYLOB, JULIAN B., D.V.M.
 - 100 Plant Ave., Elba, Ala.
- Vouchers: B. F. Cox and J. K. MacNamee.
- THOMAS, FRANK L., D.V.M.
 - 701 S. 68th St., Birmingham 6, Ala.
- Vouchers: B. F. Cox and J. K. MacNamee.
- TILL, WILLIAM A., D.V.M.
 - Rt. No. 4, Box 91, Greenville, Ala.
 - Vouchers: B. F. Cox and J. K. MacNamee.
- VICKERS, F. G., D.V.M.
 - Century, Fla.
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PETTIT, GLEN R. JR., D.V.M.

Custer, Wash.

Vouchers: E. E. Wegner and J. E. McCoy.

SAYLES, DALE M. D.V.M.

1712 A St., Pullman, Wash.

Vouchers: E. E. Wegner and J. E. McCoy.

SOAVE, ORLAND A., D.V.M.

5666 Telegraph Ave., Oakland 9, Calif.

Vouchers: E. C. McCullough and E. E. Wegner.

UNDERWOOD, STANLEY W., D.V.M. Box 92, Sunnyside, Wash.

Vouchers: G. J. Freiermuth and J. E. McCoy.

WHITLEY, VIRGINIA, D.V.M.

Rt. No. 2, Box 172, Poulsbo, Wash.

Vouchers: E. C. McCulloch and J. E. McCoy.

Second Listing

Iowa State College

Butson, Wallace J., D.V.M., R.F.D. No. 1, Jeffers, Minn.

Chapin, Wayne F., D.V.M., Mantorville, Minn.

Chapman, Gerald E., D.V.M., Peosta, Iowa.

Collins, Warren E., D.V.M., West Point, Neb. Dale, Homer E., D.V.M., 2120 Lincoln Way,

Ames, Iowa.

Doyle, Keith A., D.V.M., Westside, Iowa.

Gibbs, Roland J., D.V.M., 1201 W. Fourth St.,

Waterloo, Iowa.

Griswold, David, D.V.M., 409 N. 1st St., Winterset, Iowa.

Habluetzel, Jack E., D.V.M., Box 290, Rt. No. 1, Corpus Christi, Texas.

Holden, William E., D.V.M., General Delivery, Murphysboro, Ill.

Hollen, R. M., D.V.M., 323 W. Green St., Winterset, Iowa.

Kingrey, Burnell W., D.V.M., 2120 Lincoln Way, Ames, Iowa.

Kleaveland, R. C., D.V.M., Sioux Rapids, Iowa. Lang, Allen N., D.V.M., Remsen, Iowa.

McCracken, Donald D., D.V.M., Manilla, Iowa.

McIntosh, Arthur J., D.V.M., Villisca, Iowa. McMillan, Mac, D.V.M., 721 Second Ave., S.,

Estherville, Iowa. Magnall, Lawrence J., D.V.M., Rt. No. 1, Utica,

Meerdink, Peter B., D.V.M., Hull, Iowa.

Nelson, Norman M., D.V.M., Tioga, N. Dak. Nims, Robert M., D.V.M., Hydro, Okla. Norton, Robert E., D.V.M., Maple Plain, Minn.

Reinhart, Virgil M., D.V.M., R.R. No. 2, Carroll, Iowa.

Ruebel, A. K., D.V.M., 228 S. Riverside, Ames, Iowa.

Sceli, Donald E., D.V.M., 1847 E. Walnut St., Des Moines, Iowa.

Seymour, Milford R., D.V.M., Madelia, Minn.

Strohbehn, Alvin R., D.V.M., Rt. No. 2, Council Bluffs, Iowa.

Sweeney, Donnis E., D.V.M., 1221 S. Cornelia St., Sioux City, Iowa.

Wehler, Duane R., D.V.M., Everly, Iowa.

COMMENCEMENTS

Alabama Polytechnic Institute

At the commencement exercises of Alabama Polytechnic Institute, on Aug. 25, 1944, the following candidates were presented for the degree of Doctor of Veterinary Medicine:

Backsman, Arthur L. Barber, Robert L. Bass, Raymond L. Brawner, William R. Canon, Frank W. Carney, James P. Carter, Flon E. Cofer, George W. Cooper, Irven R. Cottle, Lawrence W. Cox. Erston S. Crespo, Victoriano Davis, James A. Davis, James J. Duffell, Gordon L. Fievet, Charles J. Graham, Oswald H. Grant, Willard R. Hines, Fleetwood Hoffmeyer, T. P. Hollinger, Shannon R. Howard, Thomas J. Johnston, William L. Jones, Robert L.

King, Claude R. Knowles, Robert P. McLean, Clifton C. Nance, Harold W. Phillips, Robert B. Porter, Ralph W. Raulston, Gilbert L. Rawlinson, William F. Reisinger, Robert C. Riddle, Herbert E. Rodgers, LeGrand D. Schaffer, J. D. Sikes, Dennis Sterrett, Robert H. Taylor, Julian B. Thomas, Frank L. Till, William A. Vickers, Francis G. Wasman, Stanley C. Watson, Joseph B., Jr. Whaley, Alexander E. Young, Cole J. Young, Walter O.

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Ohio State University

At the Commencement exercises of The Ohio State University, Sept. 1, 1944, Dean O. V. Brumley presented the following candidates for the degree of Doctor of Veterinary Medicine:

Adams, Robert C. Allison, Ralph E. Bay, Robert L. Belknap, Thomas E. Bice, Harry V. Bohl, Edward H. Boothe, Harry W. Bowman, Bernard Brandehoff, Bede E. Brown, Frank L.

Clayton, Frederick W. Crouch, James J., Jr. Dunlap, Owen E. Edmondson, Robert Edwards, Robert J. Eggleston, J. Richard Figueroa, Jaun F. Grigor, William B. Guy, Donald E. Haberman, Fred O.

Hanawalt, William L. Riggs, Harry E. Harrod, Louis W. Hitesman, Paul W. Hogsett, Thomas E. Howard, Fritz A. Kile, Janes C. Liggett, Thomas W. Linder, Robert O. Little. Ernest F. Lobach, William S. Lyle, Willis E. McClung, James L. McCoy, James A. Meckstroth, Leslie E. Thompson, Gilb Mendenhall, William J. Todd, Frank P. Meyer, Cullen W. Meyer, William E. J. Miller, Henry M. Moe, Harold M. Newhouse, Homer E. Nichols, Frederic A. Phillips, Marvin S. Porter, William E. Reed, William O. Richardson, Dale

Romaker, Robert H. Ross, Jewell N. Sautter, Jay H. Schutz, David W. Smith, Alan Smith, Carl W. Smith, Charles R., Jr. Smith, Howard S. South. Thomas M. Stansbury, Robert L. Stevenson, Robert L. Stuck, Charles E. Thompson, Gilbert J. Vesper, Robert W. Wade, Donald J. Wallace, Grady G. Washburn, Glenn A. West, Hugh G. Wilson, Ernest J. Wilson, John O. Wolfe, John E. Yates, Samuel D.

a period of three years as a result of retesting surveys made of cattle in these areas, Dr. A. W. Miller, chief of the Bureau of Animal Industry, U. S. Department of Agriculture, announced on Sept. 11, 1944. Calhoun County in Alabama and Webster County in Mississippi were placed in modied accredited status for the first time.

The testing work on the area plan is now being conducted in 17 states and 148 counties, which are not yet in the modified area. A total of 592 counties in 21 states are now in the modified brucellosis-free area. The cooperative federal-state campaign to eradicate brucellosis in cattle (Bang's disease) has been curtailed due to wartime conditions.

The Brucella vacine made from strain 19 of that organism is being used for calves between the ages of 4 and 8 months in connection with the official cooperative brucellosis work. During the twelve months ended June 30, 1944, 392,232 calves were vaccinated.

U. S. GOVERNMENT

Demerol Placed Under Narcotic Regulations

By a recent act of Congress approved July 1, 1944, the substance isonipecaine, commonly known as "demerol," has been brought under the provisions of the federal narcotic laws.

On or before Sept. 1, 1944, all registrants were required to submit an inventory of all demerol on hand July 1, 1944, to the office of Collector of Internal Revenue. Inventory form-713, is for this purpose.

All manufacturers are required to stamp each package before sale or removal. Other registrants must affix their own label or paster with the words "In Stock-Inventory July 1, 1944," followed by the name or initials of the owner.

Demerol on hand in a registrant's stock on July 1, 1944, which has been properly inventoried and labeled as above specified, may be sold without affixing tax stamps.

However, every sale or transfer of demerol subsequent to the effective date of the act is required to be made pursuant to an official narcotic order form or physician's prescription, in the same manner and to the same extent as morphine, regardless of whether the package is tax-stamped or merely bears the above described label.

Sixty Counties Continued in Modified Bang's Disease Status.—Sixty counties classified as modified bovine brucellosis-free areas, in 12 states, are being continued in that status for

AMONG THE STATES

Alabama

Alabama Veterinary Medical Association .-The annual meeting was held Sept. 5, 1944, at Birmingham. The program provided discussions of large and small animal problems.

W. W. Weissinger and W. E. Cotton: The Use of strain 19 in Treatment of Fistulous Withers of the Horse.

L. E. Beckham: Acetonemia in Dairy Cattle,

J. H. Ryland: Grass Tetany.

A. L. Holloway: Hydrocyanic Acid Poisoning in Dairy Cattle.

H. L. Allen: Forage Poisoning Due to Blad-

B. T. Simms and C. E. Cox: Sweet Potato Poisoning in Cattle.

F. A. Clark: Present Status of Milk Sanitation in Alabama.

H. A. Neighbors: Meat Inspection: Organization for Effective Work.

F. B. Whitefield and C. E. Cox: Hog Diseases.

J. K. MacNamee: Leptospirosis.

O. E. Jung, Jr.: How Do You Collect Specimens for Diagnosing Intestinal Parasites in Dogs and Cats?

S. O. Benson: Tumor of the Mammary Gland in Dogs.

R. G. Phelps: Enteritis in Dogs and Cats.

W. W. Staples: Rectum prolapse in Puppies.

K. U. Jones: Spasm of the Pyloric Portion of the Stomach in Dogs.

G. C. Kendall: Method of Worming Small Puppies (age 15 days and up).

W. W. Wells: How Do You Keep Dog Ticks Out of Your Hospital?

The following officers were elected for 1944. H. L. Allen, Demopolis, president; W. W. Staples, Anniston, vice-president; I. S. McAdory, Auburn, secretary-treasurer; L. E. Beckham, Tuscaloosa, member of board of directors.

s/I. S. McAdory, Secretary-Treasurer.

California

The Southern California Small Animal Veterinary Medical Association.—The Association met jointly with the Southern California Veterinary Medical Association, Aug. 16, 1944, in Los Angeles. Thirty-two veterinarians were present.

E. E. Jones, at the Poultry diagnostic laboratory, demonstrated parasitologic techniques and distributed notes on them. Some of the most troublesome parasites were discussed by prominent practitioners.

E. C. Jones, of Santa Monica, in discussing heart worms, stated that it is becoming a nation-wide menace.

E. C. Baxter, of Los Angeles, gave an excellent resumé of his treatment of sarcoptic and demodectic mange.

N. L. McBride, Jr., of Pasadena, lead a discussion on coccidiosis of large and small animals.

R. W. Gerry, of Los Angeles, talked on whip and hook worms and reported the results of work done in his laboratory in connection with these parasites.

It was the general opinion that more meetings should be devoted to clinical findings and treatments of specific diseases under one category.

B/CLINTON M. BAXTER, Secretary.

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Synthetic Sugar.—Although as yet produced only in experimental quantities, the production of synthetic sugar in commercial amounts may be in the offing through work carried out at the state university, says a note in *Pathfinder*.

. . .

University to Expand.—A postwar building program involving an expenditure of \$21,500,000 has been announced by the University of California. The funds are to be allocated among the installations at San Francisco, Berkeley, Los Angeles, and Davis. The appropriations for Davis include \$1,000,000 for veterinary science, \$500,000 for plant science, \$300,000 for soils and irrigation, \$250,000 for poultry husbandry, \$500,000 for home economics, \$150,000 for a students' health center, and minor sums for other projects. The medical

center in San Francisco will receive approximately \$15,000,000. These sums will be available as soon as building restrictions are removed. When that moment arrives, there should be no delay since \$1,100,000 has been set aside by the legislature for plans and specifications for the proposed buildings so that there may be no delay when construction becomes possible.

District of Columbia

Society of Parasitologists.—The American Society of Parasitologists was organized in Washington, Dec. 30, 1924, "to serve as an association of workers in the field of parasitology." The late B. H. Ransom, well-known parasitologist of the U.S. Bureau of Animal Industry was one of its charter officers. Its first annual meeting was held at Kansas City, Dec. 29-30, 1925, in connection with the annual session of the American Association for the Advancement of Science. The Society continued to meet annually with the A.A.A.S., until 1942 when annual sessions were postponed "for the duration." In September 1932, the Society was incorporated by a committee composed of Maurice C. Hall, Benjamin Schwartz, and E. W. Price, outstanding American zoölogists. same year, the Journal of Parasitology, now in its twenty-ninth volume, was presented to the Society by its first president H. B. Ward, to be designated the official organ of the A.S.P.-Excerpt from Science.

Georgia

Georgia Veterinary Medical Association.—A one day session was held at Macon, June 18, 1944. The program was a round-table discussion of postwar planning with B. E. Carlisle as leader.

The following officers were elected for 1944: A. Lamat Blalock, Sylvania, president; C. A. Moody, Newnan, vice-president; J. M. Sutton, Sylvester, secretary and treasurer.

S/ A. L. BLALOCK.

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Illinois

State Examining Board.—At the licensure examination held in Chicago, July 31-August 1, there were 57 applicants of whom 56 passed and 1 failed. This is the largest number of applicants in more than forty years, at any one examination. While veterinarians once shied at Illinois as a place to practice because the farmers were being taught by the farm adviser to treat their own animals, it seems that the alleged fling at home medicine has really made Illinois a popular state in which to locate for practice.

Duick vs. Urbanek is the name of a suit brought against George Urbanek, Chicago small animal practitioner, in which the owner of a German Shepherd demanded revocation of the doctor's license on the ground of malpractice. The evidence showed that the dog had been treated at five different hospitals during the thirty days preceding its death, the last forty hours at Dr. Urbanek's. As the charge of malpractice was unsupported, the case was dismissed "for lack of evidence." The complaint was based mainly upon the fact that when the owner called to see her dog, it was found dead in the cage, unknown to the doctor.

. . .

Farm Bureau "all het up".—Says Pathfinder as of July 12: "OPA and meat packers may look forward to embarrassing questions from the farm organizations during the next year. Farm sentiment against hog buying practices and regulations reached a boiling point at a meeting of the Champaign Farm Bureau, July 8. Dean H. P. Rusk of the College of Agriculture, University of Illinois said, 'The packers will have a real job in explaining some of their actions to the farmers.'"

lowa

Eastern lowa Association.—The following is the program announced for the 31st annual meeting of the Eastern Iowa Veterinary Association to be held in Cedar Rapids, Oct. 10-11, 1944:

- H. L. Scrivner, Maplecrest Turkey Farms: "Turkey Feeding and Husbandry in Relation to Disease Control."
- C. C. Franks, Chief, Division of Animal Industry, Des Moines: "Equine Practice" and "Bovine Brucellosis."
- L. A. Merillat, Editor, Journal of the American Veterinary Medical Association, Chicago, Ill.: "Matters of Professional and Scientific Interest in our Branch of Medicine."
- Cliff D. Carpenter, Food and Livestock Committee, War Food Administration, Chicago, Ill.: "Poultry Disease Control and the Feed Situation."
- W. L. Boyd, Chief, Division of Veterinary Medicine, University of Minnesota, University Farm, Minn.: "Cattle Diseases, Especially of the Reproductive Organs" and "Artificial Insemination in Cows and Mares."
- L. Meyer Jones, Iowa State College: "Diseases of Calves."

George W. Hawthorne, Clarinda, President, Iowa Veterinary Association: "Swine Erysipelas."

- H. L. Foust, Iowa State College, Ames, Chairman, Postwar Planning Committee, American Veterinary Medical Association: "Veterinary Postwar Planning."
- J. A. Barger, Inspector in Charge, U. S. Bureau of Animal Industry, Des Moines, lead a discussion on bovine brucellosis.
- R. M. Hofferd, Corn States Serum Company, Cedar Rapids: "The Diagnosis and Control of Some Communicable Swine Diseases." Discussion by Joe W. Giffee, J. S. Koen, J. D. Ray, Frank Breed, H. E. Pinkerton, and H. C. Smith.
- H. D. Bergman, Dean, Veterinary Division, Iowa State College, Ames, "An Address."
- H. C. H. Kernkamp, Professor of Veterinary Medicine, University of Minnesota: "Diseases of Swine due to Dietary Deficiency."
- H. E. Biester, Head, Veterinary Research Institute, Iowa State College: "Infectious Hemorrhagic Dysentery in Swine."

The officers of the association are: R. E. Elson, Vinton, president; C. B. Strain, Dunkerton, vice-president; C. C. Graham, Welsburg, secretary; A. R. Menary, Cedar Rapids, treasurer.

Kentucky



-From the Thoroughbred Record

When the swanky Thoroughbred Club of America went out to Col. E. R. Bradley's Idle Hour Farm, Lexington, for its first outdoor meeting of 1944, the candid camera caught a group of the "big ones" basking in the afternoon sun. Among them (third from the right) is none other than Past President W. W. Dimock of the AVMA. Recognized in the group are Lewis Tutt, Hunter Moody, Horace Davis, Sr., Olin Gentry, and others. The program arranged by Manager Gentry consisted of looking over the great, the near great, and the perhaps great of the famous farm, and an outdoor supper.

The Greatest Horse.—Not a record in longevity but a record in physical condition and allure is Man o' War, at the age of 27. At the shank

is Will Harbert, his groom, from whom no horseman withholds credit for the long life of



Man o' War

the greatest horse of all time; the horse that is always news. The picture is reproduced from *The Thoroughbred Record*.

Louisiana

H. H. Baur, Monroe, who was alternate delegate to the House of Representatives of the American Veterinary Medical Association, has returned from the 81st annual meeting of the Association in Chicago. Others from Louisiana who attended in addition to Dr. Baur, who was accompanied by his wife, were A. H. Groth, State University; M. H. Gandy, Baton Rouge, and H. H. Bunkie and J. P. Speaker of Tallulah. s/H. H. Baur.

Maine

Brucellosis Control Progressing.—Over 190-000 of Maine's 238,000 cattle population are now under federal and state supervision, and it is hoped that all counties in the state will be tested at least once on an area basis within the next year, according to information from Dr. B. J. Cady, inspector-in-charge, U.S.B.A.I., Augusta.

Dr. Cady spoke on the "New England Farm Hour" over stations WBZ and WBZA on Aug. 21, 1944. His subject was "Preventing Livestock Losses Through Control of Bang's Disease and Mastitis."

Michigan

Worst Fire in Turf History.—The 32 horses burned to death in the fire that swept through two stables at the Detroit Fair Grounds, June 17, have been assessed at \$200,000. It will be recalled that stables were set aftre by a drunken swipe who had been discharged.

Minnesota

A.M.

9:00 Registration

Program of Veterinary Short Course at University of Minnesota, Nov. 1-2, 1944.—A two-day conference program for graduate veterinarians will be given by the Division of Veterinary Medicine, University of Minnesota, according to announcement recently made by Dr. W. L. Boyd, chief of the Division, and Dr. J. O. Christianson, director of agriculture short courses. The theme of the program will center around a number of the more important infectious and noninfectious diseases of food-producing animals. Leading authorities will discuss the various subjects to be presented.

A registration fee of \$4.00 will be charged those who attend the conference. The program follows.

Wednesday, November 1

Presiding-R. Fenstermacher

10:00	WelcomeJ. O. Christianson
10:10	Swine Brucellosis (Demonstrations of collecting blood samples from swine)
11:00	Baby Pig DiseasesJesse Sampson
12:00	Lunch
	Presiding-H. J. Sloan
P.M.	
1:30	Nutritional Diseases of PoultryL. C. Norris
2:30	Nutrition as Related to Diseases of the BovinePaul Phillips
3:30	
4:00	Mastitis
	Thursday, November 2
A.M.	Presiding-M. H. Roepke
9:00	Important Infectious Diseases of Tur- keysB. S. Pomeroy
10:00	Diseases of Swine with Special Emphasis on Swine ErysipelasFrank Breed
11:30	Moving Pictures
12:00	Lunch
D.11	Presiding-W. L. Boyd
P.M.	

Veterinarian Honored.—Drs. William H. Feldman, H. Corwin Hinshaw, and Frank C.

1:30 Acetonemia and Allied Diseases......

3:00 Question Box and Panel Discussion

.....Jesse Sampson

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Mann of the Mayo Clinic, at the 1944 meeting of the American Medical Association in Chicago, were awarded the gold medal granted for the best scientific exhibit of the session. The award was for work on the chemotherapy of tuberculosis, including trials of diazone, promin, promizole, and such antibiotics as penicillin, gramicidin and other products of fungi, molds, and other microörganisms, of which promizole is the most promising. Feldman is a veterinarian, an alumnus of Colorado State, and has done important work on various phases of tuberculosis.

Missouri

First Missouri Sheep.—As if to prove that our country is indeed a youngster, the folks of Caldwell County are reminding the world that its first flock of sheep was driven all the way from Ohio to this state in June, 1844, "by George Smith and his hired hand," the press announcement says. George is buried at Cameron where memorial ceremonies were held this year to commemorate the event.—From Pathfinder.

Dr. Homer Patrick, formerly of Clemson College, South Carolina, has accepted the position of manager of the biologic laboratories of Purina Mills, St. Louis, replacing H. C. Schaefer, now manager of Purina's general research program.

New York

Fluorine as a Carles Preventive.—The populations of Kingston and Newburgh are being used to test the value of fluorine as a preventive of toothache, it having been demonstrated that drinking water containing 1 part of fluorine per million reduces the incidence of dental caries among town populations. In two adjacent Chicago suburbs, the one using the fluorine-free water of the Chicago water works and the other using well water containing 1/1,000,000 of that element the incidence of caries was 3 to 1 in favor of the latter. In the Kingston-Newburgh experiment, Newburgh's water will be treated and Kingston's used as the control.

Ohio

Oleomargarine Protest.—A strong resolution, protesting any change in the federal laws designed to prevent deception and fraud in the production and sale of oleomargarine, was passed at the fifty-ninth annual convention of the Holstein-Friesian Association of America which was held at Columbus, June 6-7.

Pennsylvania

Junior Veterinary Medical Association.—The Pennsylvania chapter held its annual banquet July 27, 1944, at the University Club, Philadelphia. About one hundred and fifty guests were present.

W. A. Hagan, special consultant to the chief of the United States BAI, was the guest speaker. He gave a general discussion of the following subjects: Achievements of the BAI in the past and present; Tuberculosis; Dourine; Introduction of Brahma cattle into Louisiana; and Bang's Disease. In closing, he spoke of ethics and sanitation and asked the group to remember these things when in the field practicing.

Peru

Asociación de Médicos Veterinarios.—At the general assembly on July 3, 1944, the board of directors of this Association was renewed. It is composed of Dr. Aurelio Málaga Alba, president; Dr. Moisés Insúa Hoyos, secretary; Dr. Carlos Alberto Saldaña, treasurer; and Dr. Andrés Moreau and Dr. José Mora Campos, members.

s/Moisés Insua Hoyos, Secretary.

Tennessee

E. Z. Jones, of Paris, delivered, a few months ago, a 7-legged Hereford calf with 2 heads, complete with 2 sets of eyes and ears, on Earl Compton's farm near Osage. The animal was born dead. In thirty-five years of practice, it was Dr. Jones' first experience with this type of freak animal.

Texas

New Sheep Marker.—From Irion County comes a report that a sheepman—George B. Cathey—has invented a labor- and paint-saving gadget for marking sheep, a light, hand-worked contraption, like an office stamp with its ink pad. A thousand sheep can be marked as fast as they come along without dripping or smearing of paint.

Washington

Ralph G. Torney and Philip J. Pfarr have recently taken over the Animal Clinic in Spokane, which was formerly owned and operated by J. J. Stratton, deceased.

Wisconsin

Southeast Wisconsin Veterinary Medical Association.—The Association held a meeting Aug. 31, 1944, at Madison with 50 veterinarians present. Banner Bill Morgan was the guest speaker, discussing Bovine Trichomoniasis. L. T. Donovan, president; Ray Klussendorf, delegate from Wisconsin; and C. R. Curtis, of Portage reported on the AVMA convention.

s/ James Healy

COMING MEETINGS

American Public Health Association. Hotel Pennsylvania, New York, N. Y., Oct. 3-5, 1944. Reginald M. Atwater, 1790 Broadway, New York, N. Y., chairman, program committee.

Short Course for Veterinarians. Purdue University, Lafayette, Ind., Oct. 5-6, 1944. C. R. Donham, Dept. of Veterinary Science, Purdue University, head.

Eastern Iowa Veterinary Medical Association. Hotel Montrose, Cedar Rapids, Iowa, Oct. 10-11, 1944. C. C. Graham, Wellsburg, Iowa, secretary.

Pennsylvania State Veterinary Medical Association. Penn Harris Hotel, Harrisburg, Pa., Oct. 19-20, 1944. R. C. Snyder, Walnut St. and Copley Rd., Upper Darby, Pa., secretary.

Florida State Veterinary Medical Association. Clarendon Hotel, Daytona Beach, Fla., Oct. 30-31, 1944. J. V. Knapp, Box 389, Tallahassee, Fla., secretary.

Connecticut Veterinary Medical Association. Meriden, Conn., Nov. 1, 1944. G. E. Corwin, 36 Capitol Ave., Hartford 6, Conn., secretary.

Short Course for Veterinarians. University Farm, University of Minnesota, St. Paul 8, Minn., Nov. 1-2, 1944. W. L. Boyd, Division of Veterinary Medicine, University Farm, head.

Midwest Small Animal Association. Hotel Burlington, Burlington, Iowa, Nov. 2, 1944. Wayne H. Riser, 17th St. at Ingersoll, Des Moines, Iowa, secretary.

Interstate Veterinary Medical Association. Warrior Hotel, Sioux City, Iowa, Nov. 14-15, 1944. H. C. Smith, Allied Laboratories, Sioux City, Iowa, secretary.

Mississippi Valley Veterinary Medical Association. Hotel Custer, Galesburg, Ill., Nov. 15-16, 1944. L. A. Gray, Bushnell, Ill., secretarytreasurer.

United States Live Stock Sanitary Association. LaSalle Hotel, Chicago, Ill., Dec. 6-7-8, 1944. R. A. Hendershott, Trenton, N. J., secretarytreasurer.

Cornell University. Annual Conference for Veterinarians, New York State Veterinary College, Ithaca, N. Y., Jan. 3-4-5, 1945. M. G. Fincher, New York State Veterinary College, acting dean.

MARRIAGES

Dr. Walter J. Krebs (Wash., '44), 102 W. Crockett St., Seattle, Wash., to Miss Jerry McNeal, Wenatchee, Wash., Aug. 23, 1944.

BIRTHS

To Maj. (U.P., '29) and Mrs. W. M. Lukens, Station Hospital, Kingman Army Air Field, Kingman, Ariz., a son, John Major, March 14, 1944.

To Dr. (M.S.C., '41) and Mrs. F. E. Eads, 9739 Hoxie Ave., Chicago 17, Ill., a daughter, Nancy Anne, June 15, 1944.

To Dr. and Mrs. W. J. Dundas, Waterloo, Iowa, a daughter, Jean Marie, July 4, 1944.

To Dr. (M.S.C., '40) and Mrs. Carl D. Webster, Sheldon, Ill., a son, Dennis Michael, July 5, 1944.

To Dr. (M.S.C., '38) and Mrs. Robert S. Rey, 121 Central Ave., Visalia, Calif., a son, Thomas David, Aug. 4, 1944.

To Maj. (A.P.I., '35) and Mrs. John R. Nettles, Jr., Base Veterinarian, Hamilton Field, Calif., a son, Carroll Lee, Aug. 8, 1944. First son, John R. III, May 14, 1943.

To Capt. (K.S.C., '43) and Mrs. Robert T. Handle, 171 Lake Whatcom Blvd., Bellingham, Wash., a son, Robert Brian, Aug. 15, 1944.

DEATHS

Erland V. Lagerberg (St. Jos., '18), 49, of Fort Morgan, Colo., died Aug. 8, 1944, in an attempt to rescue a 12-year-old boy from the North Sterling reservoir. Dr. Lagerberg was associated with the Bureau of Animal Industry at the time of his death. He had been a member of the AVMA since 1924.

Otis L. Sutton (Cin., '11), 59, of Cincinnati, Ohio, died recently. Dr. Sutton had been a member of the AVMA since 1912.

J. J. Stratton (Wash., '12), 65, of Spokane, Wash., died recently. Dr. Stratton was admitted to the AVMA in 1939.

Arthur Paul, 74, of Escondido, Calif., died Aug. 15, 1944. Dr. Paul was born in Norwich, England and came to America at the age of 18. He studied medicine and veterinary science at Chicago.

Valentine Stang (Veterinary College of Berlin), 68, Berlin, Germany, died June 18, 1944. Those who knew Dr. Stang will recall that he attended the International Veterinary meeting here in 1934. Dr. Stang was admitted to the AVMA in 1934.

Glenn E. Nelson (K.C.V.C., '13) of Sloux City. Ia., died recently. Dr. Nelson was admitted to the AVMA in 1917.

Proceedings, Eighty-First Annual Meeting American Veterinary Medical Association Chicago, Ill., August 22-24, 1944

Opening Session

Tuesday Morning, August 22, 1944

The opening session of the Eighty-first Annual Meeting of the American Veterinary Medical Association, held at the Palmer House, Chicago, Ill., August 22-24, 1944, convened at 10:35 a.m., President Charles W. Bower presiding.

PRESIDENT BOWER: By the authority vested in me as president, I hereby declare the eighty-first annual convention of the American Veterinary Medical Association now in session.

The invocation will be given by Dr. Charles Ray Goff, Pastor, Methodist Temple, Chicago.

Invocation

DR. CHARLES RAY GOFF: O, eternal God, our Father, we invoke Thy blessing upon this gathering today. We that we are still permitted to meet in a land of freedom, yet we remember that we have responsibilities because of this. And our minds and hearts and prayers go out today to those who are paying the price to make this liberty possible.

We pray for these boys of ours out yonder on the high seas and across in these places of great danger. We know that some, before the day closes, will give up high seas and across in these places of great danger. We know that some, before the day closes, will give up their lives. Oh God, be with them in this, their last day on this earth, and help us to measure ourselves against their sacrifice. And may we, O God, commit ourselves to the highest and best that is within us.

Bless this organization all over the land, everyone represented in it. Bless these days, these hours together. May they be fruitful and meaningful, and may we in this year that is to come give everything that we have

may they be fruitful and meaningful, and may we in this year that is to come give everything that we have to America and to the world and to Thee, our God. We ask this in Christ's name. Amen.

President Bower: We will now be favored by a solo by Mrs. Wesley A. Young, who will sing "The Star-Spangled Banner."

Singing of "The Star-Spangled Banner." PRESIDENT BOWER: There will be a slight change in the program. Governor Green has been delayed a short while. He will be here later this morning.

No veterinary meeting is complete without the ladies. Therefore, it is indeed a privilege that we have with us this morning the president of the Women's Auxiliary who will deliver greetings from the Women's Auxiliary-Mrs. J. C. Schoenlaub. (Applause.)

Greetings from the Women's Auxiliary

Mrs. J. C. SCHOENLAUB: Mr. President, Guests, Ladies and Gentlemen of the American Veterinary Medical Association: I extend to you most cordial greetings. It is fitting and proper that this convention meets in Chicago, the home of the greatest war materiel producing center in the country, hence, so vital to winning the war.

The Women's Auxiliary, remembering its purpose, has striven to make its contribution to the war effort inside the Auxiliary as well as without. Not one of you here but who belongs to one or more organizations developed to meet a specific need. Our Student Loan Fund is in active use, and it is rendering an excellent service, and there will be greater demands upon that fund as time

I feel that the veterinarians of today and tomorrow are rendering one of the greatest services in the communities in which they live. In spite of the suffering and the upheaval of other counties, it is imperative that we look to our home problems and continue to solve them. look to our home problems and continue to solve them. We cannot sink back into the complacency of the prewar attitude. What has gone on in the past and what is going on now will influence our lives and the future of this country for generations to come. Distance no longer is a factor. The secret airways of today will be the future flights of tomorrow. Therefore, it will be the future anticipate the needs of the future. take great vision to anticipate the needs of the future. must build on a firm foundation, for we are on the threshold of a new era.

Our men are fighting on the far-flung battlefronts, that we may enjoy the four freedoms. We must strive to look upward and outward and forget the inequality of man. We hope that, when this convention meets another year, the greatest of catastrophes will have passed, and that man will live his way of life and enjoy peace. (Applause.)

President's Address

PRESIDENT BOWER: In accordance with the change in

PRESIDENT BOWER: In accordance with the change in program as announced a few moments ago, the next on the program will be the president's address.

... President Bower read his address. (Published in the September JOURNAL.) . . . (Applause.)

PRESIDENT BOWER: I have just been informed that Governor Green has been unavoidably detained and will not be able to be with us at all. However, we will at this time have the address of welcome by Dr. Wesley A. Young of Chicago. (Applause.)

Address of Welcome

DR. WESLEY A. YOUNG: President Bower, Ladies and Gentlemen: I have been everything from a farm boy to a veterinarian trying to treat cattle, but this is my first time to be the Governor's understudy, but I assure you I am going to enjoy my part of it. Perhaps this is the time to relax a little bit and see if we can get a chuckle out of ourselves. These are serious days, and we are serious about twenty-four hours a day.

and we are serious about twenty-four hours a day. We are certainly serious practically every minute of our waking days, and perhaps it will be good for us if we change the rate of horseback driving, as the old man said, as you do when you get tired, and do something else for a minute.

Possibly I am in the position this morning of the lady who was leaning out the upstairs window on the alley side of the house. She happened to lean a little too far and fell head first into the garbage can. Just then the Chinese laundryman passed by and saw the scene. He said, "My goodness, how wasteful you Americans are. That woman is good for forty years yet." (Laughter.)

Possibly I am good for something. If I can pinch-hit or the Governor I will certainly feel it a distinct honor to have been called upon to say a few words of

welcome to you people.

Now, to be serious. The funny part of what I said

was just as a matter of relaxation. Let's really be serious and think what the veterinary profession means not just to the United States or to the Americas, but what it means to the world. For without the veterinary what it means to the world. For without the veterinary profession, the world would be a very, very hungry place. And today and this week, you people representing nearly 10 per cent of the veterinarians who are not in the armed services, at home at any rate, are in my city. As a member of the Local Committee on Arrangements, I feel grateful to each and every person who has traveled any distance whatsoever to come to Chicago

to attend this meeting. The effort which you have put forth is more than the usual effort required for such a journey. I have done a little traveling in the past year or so, and I appreciate what you folks have gone through to get here.

It means to me, and I am sure to the other members of the committee and to the officers of the Association,

that the veterinary profession, even though it only num-bers some thirteen thousand in the United States, is made up of a band of good fellows and their wives and families who stick together and do their job, whether they get credit for it or not.

I am very, very happy to say to you all: welcome to

Chicago! (Applause.)
PRESIDENT BOWER: In responce to this address of welcome, we have with us a member of our profession, a neighbor and friend, the Honorable George W. Gillie, a member of Congress. (Applause.)

Response

(Applause.) (see "The Chicago Session," p. 177.)

PRESIDENT BOWER: The next part of the program will be conducted by Dr. O. V. Brumley, chairman of the Executive Board, for the presentation of awards.

DR. O. V. BRUMLEY: Mr. President, Members of the Convention: It is my pleasure at this particular time to present certain awards as outlined in the program.

Presentation of President's Certificate

I will ask President Bower to please come forward. . . . Dr. Brumley read his statement relative to the President's Certificate. . . (Applause.) . . . (see "The Chicago Session," p. 177.)

Presentation of President's Key

Dr. Brumley read his statement relative to the President's Key. . . . (Applause.) . . . (see "The Chicago Session," p. 177.)

Presentation of Twelfth International Veterinary Congress Prize

At this time we wish to present the Veterinary Congress Award. The usual brief explanation is in order relative to this award.

When the Twelfth International Veterinary Congress was held in New York in 1934, a sum of money was raised in this country for proper entertainment of the delegates from the various countries. Some of the money was not spent and it was turned over to the American Veterinary Medical Association. The interest from this fund, which is invested in government bonds, was to be used for an annual award for distinguished service in veterinary science and the livestock industry. award is presented at each annual convention.

I am happy to announce that the committee this year has selected Dr. D. F. Luckey for this award. Will Dr. Luckey please come forward?

Dr. Luckey, I have the honor to present you with this award at the proper time. Before doing so, I wish to read the citation which goes with this award.

... Dr. Brumley read his statement relative to Twelfth International Veterinary Congress Prize. (see "The Chicago Session," p. 177.)

I now present to you this Twelfth International Veterinary Congress Prize Award. (Applause.)

DR. D. F. LUCKEY: Ladies, Veterinarians, Friends: 1 feel a little like an old friend of mine who lived at Breckenridge, Mo. He was a dainty, little, old fellow, very religious. He had about five or six hundred sheep. He went to prayer meeting one night, and the leader called on him to make a talk. He said, "I don't feel worthy. As I opened the gate the other day to let the sheep through, I fell down and five hundred sheep ran over me, and I said 'Damn it'." (Laughter.)

I hardly feel worthy of the flattering remarks made by Dr. Brumley, but I am very, very proud of this award, and I want to thank the Committee and the Association.

When the beasts of the field, the fowl of the air, the fish of the sea, and all creeping things, parasites, and germs, were created in the beginning, the Scripture says that God gave man dominion over all of them. is an express command that we should exercise and forward our dominion in these matters, promoting and propagating the good mold of penicillin, and destroying the harmful, such as tuberculosis germs. Carrying out this ideal, it seems that Divine Providence gives us light and vision.

The veterinary profession has certainly made good in exercising its part of this dominion that is implied. We are compensated by the thought, for instance, that today thousands of children are being raised free from the danger of bovine tuberculosis infection, whereas, but for the tuberculin test, it might have been otherwise.

Just a short state history on the question of the intradermal test, not going back to the beginning. In March, 1911, Dr. L. D. Brown, now deceased, and Dr. H. C. Ward, now at Fulton, Mo., were testing the herds of dairy cattle around Independence, Mo., under a city ordinance. They applied the intradermal test to a lot of these herds and followed with the old subcutaneous test. They soon found that the intradermal test was the more accurate. In April, 1911, we began the systematics of the factor of the contradermal test was tematic test of all of the dairy cattle supplying milk to Columbia, Mo., under a city ordinance. We began the middle of April using the intradermal test exclusively in the state work. For many years we used the intradermal test exclusively in our intrastate work, and we used the subcutaneous test on cattle for shipment out of the state. The old reports of the Missouri State Board of Agriculture will show the comparative results. But, in short, we found the intradermal test was more accurate, both by way of cleaning these herds and making a good postmortem record.

One thing that is not generally known: In October, 1913, the Canadian Government sent Dr. George Townsend, now at New Glasgow, Nova Scotia, down to Columbia, Mo. My men and I spent some two weeks with him, showing him the intradermal test and the reaction nim, showing him the intracermal test and the reaction on condemned cattle. He went back home, and they worked with the test a while and rejected it. In about 1914 I received a circular from the United States Bureau of Animal Industry stating that the intradermal test was not reliable, and it was thereby rejected both by the Canadian and our own governments. You can scarcely realize how discouraging those reports were to me. But finally in 1921, after we had used this test straight through for ten years, it was recognized at a tuberculosis conference in Chicago and became one, at least, of the official tests at that time.

Again, I thank the Committee and the Association. (Applause.)

Presentation of Borden Award and Medal

PRESIDENT BOWER: This year, for the first time, American Veterinary Medical Association is privicooperate in conferring an award which been made available for us to administer, by one of the country's leaders in the dairy and food industry.

It now gives me pleasure to introduce Mr. W. A. entworth, director of industry relations of the Borden ompany, New York, who will explain the purposes of Wentworth, Company, New

MR. W. A. Wentworth: Mr. President, Ladies and Gentlemen: I was particularly interested in two remarks which your president made in his address. The stress that he laid upon the public relations work of this asso-

ciation was of particular interest because for some ten years I have had an interest in that work with the company with which I am associated. It reminded me, however, of a meeting of these high-powered public relations counsels that get together once a month in the City of New York. I go to listen, sometimes get an idea or two. But at one of these meetings recently, the chairman of that group said, "You will recall how we have struggled for years to get a definition of what public relations are. I got the best one that I have heard at home from our colored maid the other day."

He said he was talking with his wife about what public relations are, and the colored maid, dusting around the room, finally said to him, "Well, Mr. Davidson, I have listened to you a great deal about this public relations business. It seems to me that public relations am letting people know what you want them to know, without telling them." (Laughter.)

For the most part, it seemed to me that your association is proceeding very much like the rest of us proceed, and that is, doing a good deal of telling. Up to now, we haven't found the way of doing it as the Negro maid suggested but, nevertheless, down at the bottom of our hearts, almost all of us realize that that is a good way to accomplish it.

The second thing that your president mentioned, which seemed to me to be somewhat the opposite of what we experience in our industry, was the desirability of "upgrading." He mentioned with a good deal of pride, I would say, the accomplishment of getting veterinarians upgraded. But have you ever heard of upgrading butter? Have you ever heard of upgrading ggs and a few more things? Well, "upgrading" to us in the dairy industry goes along with black markets and bootlegging. At first I was a little shocked when I heard your president use that term, but he made it perfectly clear to me, not a member of your profession, that upgrading has two definite and distinct meanings. I congratulate you on getting a constructive use out of it as contrasted to what we in the dairy industry sometimes suffer.

Just one other thing that seemed to be quite impressive. I have attended a number of wartime conferences and industry conventions, but today is the first time I ever heard a congressman point with pride to what veterinarians or other professional people have done. I am sure that, when a congressman comes out here and does other than point with pride to what Congress has done or what he as a congressman has done, you have a distinctive member of Congress. (Laughter.)

But to get at this matter of the Borden awards, one of which is about to be presented, I should like to read a brief statement which I have prepared.

... Mr. Wentworth read his statement relative to the basis of the Borden Award. . . (Applause.) . . . (see "The Chicago Session," p. 177.)

PRESIDENT BOWER: Mr. Wentworth, before presenting the recipient, I wish to express, on behalf of the Association and its Committee on Awards, our sincere appreciation of the fine recognition which your company has given to veterinary science and the veterinary profession in their relationship to improved milk supplies by making available this award for our administration. The Committee has endeavored to carry out the purposes of the Borden award as you have explained them.

I now ask Dr. I. Forest Huddleson to please come to the platform. . . . (Applause.) . . .

CITATION

Dr. Huddleson, on behalf of the AVMA Committee on Awards, it is my pleasing duty to designate you as the recipient of the Borden award for 1944 for outstanding achievements in contributing to the control of dairy cattle diseases. Your selection is based upon several considerations and accomplishments, not confined to the year just past but extending over a long period of meritorious hard work.

You have distinguished yourself by your studies on brucelloais in practically all of its phases. Of particular significance, in so far as this award is concerned, is your development and demonstration of the rapid or plate agglutination test as a reliable means of diagnosing Brucella infections in animals and man, but which has had its widest application and benefits in dairy cattle. You devoted years of patient effort in developing and perfecting a test antigen so highly sensitive that results could be obtained in the space of minutes, as compared with many hours by the usual method. Moreover, you solved a number of problems upon the answers to which depended the acceptance and successful application of the rapid agglutination test as an accurate method in the hands of trained individuals.

But it is not simply for these accomplishments that the Committee has selected you for the honor of the Borden award. In the field of Brucella investigations, you have won worldwide distinction for establishing many facts which are important to our knowledge of brucellosis in bovines and fundamental to the control of the disease. Thus, your demonstration that Brucella abortus requires an increased CO2 tension for primary isolation; the development of a culture method to determine the presence of Brucella organisms in milk; your studies on the virulence of Brucella cultures; the methods for differentiating the three species of Brucella; your observation that calves from infected cows do not remain infected with Br. abortus and are highly resistant to infection; the possibility of using non-virulent cultures as immunizing agents in cattle; all these and other results of years of intensive investigation have had a marked effect upon our concept of bovine brucellosis and the means for its control. Your studies have been of great significance not only to the dairy-cattle industry but also to the health of milk consumers.

Dr. Huddleson, by diligent and unselfish devotion to research, you have won wide recognition and many honors in the field of Brucella investigations. The veterinary profession, in turn, is honored by your accomplishments which reflect so much credit on the science we cultivate.

science we cultivate.

Mr. Wentworth, our Association is privileged to cooperate with your company in conferring this award for which we now present Dr. Huddleson.

MR. Wentworth: Dr. Huddleson, it is a pleasure for me to be here as the representative of the Borden Company in this connection. There are two parts of this award. One is a medal, a pretty good paper-weight, if you don't have any other use-for it. It is made out of the same stuff they have buried in the hills of Kentucky. On the reverse side it says: "Award for outstanding research contributing to the control of dairy-cattle disease to I. Forest Huddleson, 1944, by direction of the American Veterinary Medical Association."

Dr. Huddleson, on behalf of the Borden Company, I take great pleasure in presenting you with that award and this little piece of blue paper which goes with it in the amount of \$1,000. (Applause.)

Dr. I. Forest Huddleson: Mr. Wentworth, President Bower, Ladies and Gentlemen: It is indeed a great honor to have one's past labors recognized as being worthy of the Borden award and medal. I must confess that it is with considerable modesty that I accept this award because I am conscious of the fact that my past and present associates have contributed no small part to the labors which this award recognizes.

I assume, Mr. Wentworth, that the award does not have the same significance as a wreath laid upon a grave or imply that the recipient's inquisitive soul should now rest in peace. (Laughter.)

I take it that the Borden award is a challenge to one's future efforts as well as a reward for the past. I frust that the future will not find me unworthy of this honor. (Applause.)

PRESIDENT BOWER: The AVMA award, voted in 1943 to Dr. John R. Mohler, was to have been presented today, but he is not with us at this time, and it will therefore be postponed. So, our final award for this morning's, session will be given by Dr. Wesley A. Young.

Presentation of Humane Act Award

DR. WESLEY A. YOUNG: President Bower, Ladies and Gentlemen: Again a moment of your time while I tell you about an interesting young American. I am going to ask Frank and Sally Kiemele to come to the platform, please. I am asking both the youngsters to come up

because they work as a team.

This is the first year that the Humane Act award, which President Bower and other members of the Board have been interested in bringing about, has been presented. Humane Act award was to be given to a boy or girl in the United States, not yet past their eighteenth birthday. We can't give it, or any part of it, to Sally officially because she is past eighteen, but Frank is just seventeen. The information about the award was sent to the various veterinary schools, to the National Humane Review, the American Humane Association, to the veterinary student publications, the Future Farmers of America for its clubs, the Boy Scouts, Girl Scouts, and the press in general. Of course, the AVMA JOURNAL also carried a story.

As a result, we had nominations from different

of the country, and I am happy to say that the winning nominee was a Chicago boy.

The idea of this Humane Act award was to present it to someone who had done something beyond the ordinary in behalf of kindness to animals, not necessarily for rescuing an animal from danger.

I will take one or two minutes to tell you why Frank was selected for this award by the committee. I have a copy of a letter which I wrote Frank on Dec. 30, 1938. That letter was in response to the first issue of what has been known as "Pet News." I received one of the first n as "Pet News." I received one cit, which was hand printed, and there were copies of it, which was hand printed, and there were included eleven cents as a donation to our work. That caused me to be interested. I found that Frank had started "Pet News" in memory of his dog "Rinty." "Rinty" was stolen by one of the dognappers, of which we have too many. He contracted distemper, and they were so kind, they brought him back to the neighborhood, or rectically dead! practically dead!

That was my first introduction to this youngster, his sister, and family. "Pet News" came out. I have in my hand the fourth number, that is this year, illustrated with clever drawings of various animals, in pen and ink on ordinary copy paper. Both Frank and Sally draw and write. But, in general, Frank has been the editor and Sally has been the art editor. Mark you, this was sent to people without any subscription price, and it told Sally has been the art editor. Mark you, this was sent to people without any subscription price, and it told interesting animal stories. One I noticed in this particular issue is about a sow that had a litter of twenty pigs. Maybe that is interesting to veterinary medicine. After all, it is good propaganda for the public to get some interesting news about animals. There were items in the fourth edition about puppies and pigs and sows and horses and goats and birds, some of them being operated on by veterinarians.

So, I think we are in the right pew, as it were, when these youngsters are recognized this morning. I would like to give you a little insight into their souls. Here is another letter dated April 7, 1939. This is from Frank to me, after his leg had been broken. He had caught the interest of a well-to-do Chicago woman, who lives on the north side of Chicago in a most elaborate home. Frank says this: "I think she is the kindest lady I know. Do you know what she did? She came all the way out to my house just as soon as she found I had my leg broken, and wanted to buy me a wheel-chair. Gee, I don't understand ladies like her. It would be different if I were a kid that had a swell home and my dad were rich, but we are just people."

Shortly after that, we found that "Pet News" looked something like this. It had grown into legal size paper, ten pages, went to 21 countries in the world-21 countries, if you please—and to all the states in the Union. That coming from a boy who lived in a little house on the alley!

In a few days this lad, instead of writing articles for "Pet News," may be writing the death warrant of some Jap or Nazi. His expectation is to go into the armed services; he is taking his physical for the Marine Corps

today. He has been like a child of my own. Frank, this is one of the highlights of my life to be able to hand this over to you youngsters with my very best

wishes and congratulations.
... Presentation of certificate. . . (Applause.)
PRESIDENT BOWER: Dr. Hoskins, chairman of the Committee on Local Arrangements, will make some announce-

ments at this time.
... Dr. H. Preston Hoskins made announcements.
...
PRESIDENT BOWER: We will now recess until 1:30 this afternoon.

. . . The meeting recessed at 12:50 p. m. . .

First General Session

Tuesday Afternoon, August 22, 1944

The following moving pictures were shown: "Animals in the Service of Man," produced by the American Humane Association and shown through the

courtesy of The Anti-Cruelty Society of Chicago.

2 Repulsion of Teeth," shown and commented on by Dr. R. Frank, School of Veterinary Medicine, Kansas State College.

The meeting convened at 2:25 p. m., the president presiding.

THE PRESIDENT: There has been a change in the program this afternoon. The first paper was to be "Veterinarian's Place in Livestock Loss Prevention" J. A. Barger, Inspector in Charge, U. S. Bureau of Animal Industry, Des Moines, Iowa. He is unable to be present. This paper will be read by title and published in a future issue of the JOURNAL.

We are indeed fortunate to have as our next speaker one of the outstanding nutritionists in the country, S. Hughes, Professor of Biochemistry, Kansas College. He needs no introduction to many of you; he will present "Newer Information on the Rôle of Vitamins and Minerals in Animal Health." Dr. Hughes! Dr. Hughes!

Minerals in Animal Health." Dr. Hughes!
... Dr. J. S. Hughes, Kansas State College, Manhattan, Kans., presented his address, "Newer Information on the Rôle of Vitamins and Minerals in Animal Health" with the use of slides. . (Applause.) (To be published.)
The President: Thank you, Doctor.
Next on the program will be a panel discussion on parasite problems. Will these men, when I call their

names, come to the platform and take their positions at the panel table?

First of all, the chairman, Dr. Kent R. Dudley, a practitioner, Iola, Kansas; Dr. E. A. Benbrook, head of the Department of Veterinary Pathology, Iowa State College; Dr. M. M. Leonard, practitioner, Asheville, North Caro-Dr. M. M. Leonard, practitioner, Asneville, North Carolina; Dr. B. T. Simms is not able to be here, and Dr. Cecil Elder of the University of Missouri has kindly consented to sit on the panel for Dr. Simms; Dr. D. E. Trump, practitioner of Minnesota.

. Dr. Kent R. Dudley, Iola, Kansas, assumed the chair. . . (Panel Discussion on Parasite Problems to be

published.)

. . . Recess. .

Nomination and Election of Officers

PRESIDENT BOWER: Please come to order. We will now into business session for the purpose of nominating ficers. The executive secretary will read instructions as to nominations and ballot.

EXECUTIVE SECRETARY HARDENBERGH: Article III of the Administrative By-Laws provides that these rules govern-ing the election of the president-elect shall be announced to the floor of the general session preceding the election, by the executive secretary or his legal representative.

. . . Executive Secretary Hardenbergh read article III pertaining to the election of the president-elect. . .

PRESIDENT BOWER: First will be nominations for presi-The chair will entertain nominations for president-elect.

Dr. Chas. H. Seagraves (Ore.): Mr. President, I wish to place the name of Dr. B. T. Simms before the Association as a candidate for the office of president-elect. Dr. Simms was, for more than twenty years, in

charge of the experiment station connected with Oregon State College. I, as a practitioner, learned to appreciate this man, and I assure you that he has as near 100 per cent support in our state as any man who ever lived there.

Dr. Simms went before groups that had proposed legis-tion contrary to the interest of the veterinary pro-Dr. Simms went before groups that a property lation contrary to the interest of the veterinary profession, and defended that interest at considerable hazard to himself. It gives me great pleasure to offer his name for your consideration. (Applause.)

PRESIDENT BOWER: You have heard the nomination of Dr. B. T. Simms. Are there further nominations

or seconding remarks?

DR. EARL E. WEGNER (Wash.): I would like to say a word on behalf of Dr. B. T. Simms. This as an unusual meeting of the AVMA. I have attended many of these meetings, and it is the first one that B. T. Simms has not attended. I understand the reason he is not here is because he is supposed to be on the job and he here is because he is supposed to be on the job and he is not permitted to be here. I would assume there are very few men who have belonged to this association as long as B. T. Simms, and who have given as much as Dr. Simms in his effort and thought and support for good veterinary service the country over. The fact that he is engaged at the present time in research work of such a nature that he cannot be here is a splendid recommendation for him.

mendation for him.

I second the nomination of Dr. Simms. He was in the Northwest for many years. I knew him very well, personally and professionally, and I know that the Association would honor itself if it should choose him as the president-elect.

President, I would like to sec-br. Simms. I have known him a Dr. Fraguson: Mr. ond the nomination of Dr. Simms. I have known him a great many years. He is a scientist of no small repute. great many years. He is a scientist of no small repute. He is a friend of the practitioner, a friend of the veterinary profession. It is a long time since the South has had a president, and I take pleasure in making the second.

Dr. I, S. McAdory (Ala.): I wish to second that, also. Dr. Simms has his reputation directly in the West; he still maintains that reputation in the South, and we are certainly glad to have him presented for president-elect.

PRESIDENT BOWER: Are there further remarks or nominations?

Dr. Ferguson: Mr. President, not hearing any fur-ther nominations, I move that the rules be suspended and the secretary be instructed to cast the unanimous ballot for Dr. Simms as president-elect.

PRESIDENT BOWER: The motion has been moved and seconded that the rules be suspended and that the secretary cast the unanimous ballot for Dr. B. T. Simms of Auburn, Ala., as president-elect. Any remarks? If not, all in favor signify by saying "aye"; contrary same. Carried.

EXECUTIVE SECRETARY HARDENBERGH: and Members: In accordance with your instructions, I hereby cast the unanimous ballot of this association for the election of Dr. B. T. Simms of Auburn, Ala., for the office of president-elect. (Applause.)

PRESIDENT BOWER: There will be five vice-presidents nominated. The secretary will read from the By-Laws.

. . . Executive Secretary Hardenbergh read section of article IV pertaining to the election of vice-presidents. .

PRESIDENT BOWER: Do I hear nominations for vice-

president?

DR. CHAS. C. RIPE (Ga.): I would like to place in nomination a colleague, a Southerner, who has been a member of this assoication since 1914, has missed only two or three meetings. He is a practitioner of great repute in his own home state. He served on his State Board of Veterinary Examiners and also the Procurement and Assignment Board of his state—Dr. W. A. Barnette, practioner form Greenwood, S. Car.

PRESIDENT BOWER: Dr. Barnette has been nominated. Are there further nominations?

MEMBER: I would like to second Dr. Barnette's nomination.

ination. Dr. B. E. CARLISLE (Ga.): I have known Dr.

Barnette for the past twenty-five years, and I would like to say to the membership of the Association that he is a practitioner than whom no one is held in higher esteem throughout the South. We would be very happy to have him as one of the vice-presidents of the Association. I take great pleasure in seconding his nomination.

PRESIDENT BOWER: Are there further nominations for vice-presidents? We must have four more. You know, this job is pretty hard on the president.

Dr. W. L. Boyd (Minn.): I would like to nominate Dr. C. R. Donham of Lafayette, Ind.

Dr. EARL E. WEGNER (Wash.); I would like to present the name of M. O. Barnes of Olympia, Wash., a man who has worked for the veterinary profession for many years. He occupies the position of secretary, and he is now our representative in the House of Representatives.

DR. ASHE LOCKHART (Mo.): I would like to place in nomination our good Missouri practitioner, Dr. Frank H. Suits of Odessa, Mo.

Dr. A. E. CAMERON (Can.): I would like to name as vice-president, Dr. J. A. Campbell of Toronto.

PRESIDENT BOWER: Are there further seconds, nominations? We have five candidates, I believe. W What is your pleasure?

DR. McADORY: If there are no other nominations, move that the nominations be closed, the rules suspended, and the secretary be instructed to cast the vote for the Association.

DR. SIGLER: Second it.

PRESIDENT BOWER: Moved and seconded that the nominations be closed and the secretary cast the unanimous ballot for the candidates that have been nominated. Any

... The question was called for....
The question has been called. All those in favor signify by saying "aye"; contrary the same. So ordered.

EXECUTIVE SECRETARY HARDENBERGH: Mr. President and Members: In accordance with your instructions, I hereby cast the unanimous ballot of the membership for the election of vice-presidents in the order named, first, second, third, fourth and fifth, for the ensuing year:

> W. A. BARNETTE, Greenwood, S. C. C. R. DONHAM, Lafayette, Ind. M. O. BARNES, Olympia, Wash. FRANK H. SUITS, Odessa, Mo. J. A. CAMPBELL, Toronto, Ont.

(Applause.)

PRESIDENT BOWER: Next, the chair will entertain nominations for treasurer.

Dr. H. Preston Hoskins (Ill.): I take great pleasure in nominating Dr. J. V. Lacroix for treasurer.

PRESIDENT BOWER: Dr. J. V. Lacroix has been nominated to the office of treasurer.

DR. CECIL ELDER (Mo.): I would like to second the nominaion of Dr. Lacroix.

DR. FERGUSON: I move the rules be suspended and Dr. Lacroix receive the unanimous vote of ciation for treasurer for the ensuing year.

Dr. McADORY: Second the motion.

PRESIDENT BOWER: Moved and seconded that the rules be suspended and the secretary cast the unanimous ballot for Dr. J. V. Lacroix for treasurer of the American Veterinary Medical Association for the ensuing year. Any remarks?

The question has been called. All those in favor signify by saying "aye"; contrary the same. So ordered.

EXECUTIVE SECRETARY HARDENBERGH: Mr. President and Members: In accordance with your instructions I hereby cast the unanimous ballot of the Association for the election of Dr. J. V. Lacroix, Evanston, Ill., for treasurer of the Association for the ensuing year.

PRESIDENT BOWER: That concludes the election of officers.

. . . The meeting recessed at 4:55 p. m. . . .

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Second General Session

Wednesday Morning, August 23, 1944

The second session convened at 9:20 a. m., President Bower presiding.

The following moving pictures were shown:
"Surgery of the Bovine Eye," produced and commented on by Dr. James Farquharson, Division of Veterinary Medicine, Colorado State College.
"Clinical Conditions," from the Department of Animal

Pathology and Hygiene, University of Illinois, and commented on by Dr. C. C. Morrill.

President Bower: The first paper is entitled "Some Useful Techniques in Dairy Practice," by Dr. C. Harvey Smith, Crown Point, Ind.
. . . . Dr. C. Harvey Smith read his address. .
(Applause.) . . . (To be published.)

PRESIDENT BOWER: Next will be "Surgery and Ob-sterrics in the Bitch and Cow," by Dr. Herman Dykema of Michigan.

, Dr. Herman Dykema read his address. . . .

(Applause.) (To be published.)

PRESIDENT BOWER: The next paper on the program is "Hormonal Therapy in Relation to Veterinary Practice," by Dr. R. P. Reece, Assistant Professor of Dairy Husbandry, College of Agriculture, New Brunswick, N. J. Dr. R. P. Reece read his address. . . (Applause.) (To be published.)

PRESIDENT BOWER: The next is a panel discussion on obstetrics, chairman, Dr. Ferguson. Will you come to the platform as I call your name? T. H. Ferguson, F. A. Hall, Vilo T. Rose, J. E. Weinman, F. M. Wilson and Walter Wisnicky.

. Dr. T. H. Ferguson assumed the chair. . (Panel Discussion on General Practice, Surgery and Obstetrics, to be published.)

Third General Session

Wednesday Afternoon, August 23, 1944

The third general session convened at 1:40 p. m.,

President Bower presiding.

PRESIDENT BOWER: The session will please come to order. We are fortunate indeed and honored to have with us this afternoon Dr. W. E. Herrell, Consultant in Medicine, Mayo Clinic, and assistant professor of medicine, Mayo Foundation, Rochester, Minn., who will dis-cuss "Experimental and Clinical Studies on Penicillin." Dr. Herrell. (Applause.)

. . . Dr. Herrell gave an extemporaneous address, illus-

trated with slides. . . . (Applause.)

President Bower: We will go ahead with the pro-

PRESIDENT BOWER: We will go ahead with the program, with the exception of a minor change.

The next paper, "Agricultural Research During and After the War," by Dr. E. C. Auchter, will be read by title and published later. Dr. Auchter was not able to be present. (To be published.)

The next paper to be presented is "Gastroenteric Disease in Swine," by Dr. H. C. H. Kernkamp of Minne-

sota. (Applause.)

. . . H. C. H. Kernkamp read his address. . . . (Applause.) (To be published.)

PRESIDENT BOWER: There is another paper that is not printed in the program, which will be read by title and published later, "Sulfathalidine Therapy of Porcine Enteritis," by Dr. Robert Graham and his co-workers. Although this paper will not be read, pertinent information from it will be used, and will be used particularly by Dr. Graham in the panel that follows.

We will now have the panel discussion on swine diseases. As I call their names, I wish the panel members would come forward. Chairman, Dr. Frank Breed; Dr. H. E. Biester; Dr. W. H. Boynton; Dr. J. B. Bryant; Dr. Robert Graham; Dr. J. L. Jones; Dr. J. D. Ray and

r. T. L. Steenerson. Dr. Frank Breed assumed the chair.

(Panel Discussion on Swine Diseases to be published.)

Fourth General Session

Thursday Morning, August 24, 1944

The fourth general session convened at 9:20 a. m., President Bower presiding.

The following moving pictures were shown:

"Avian Penumoencephalitis," produced by the Division of Animal Husbandry, California State Department of Agriculture.

"Derriengue," by Dr. Fernando Camargo N., Depart-ment of Animal Health, National University of Mexico. President Bower: The first discussion will be that of Dr. Zepp of New York City, who will discuss "Non-parasitic Skin Diseases."

. Dr. C. P. Zepp read his paper. . . . (Applause.)

(To be published.)

PRESIDENT: The next on the program is "Immunization Against Canine Distemper," by Dr. E. C. Khuen.
. Dr. E. C. Khuen read his address. . . (Applause.)
(To be published.)
. . . Dr. M. M. Leonard, First Vice-President, assumed

the chair.

CHAIRMAN LEONARD: The next on our program is "Proteins and Vitamins in Relation to Nutritional Deficiency of Mother's Milk," by Dr. Morris, Executive Secretary, Committee on Foods, New Brunswick, N. J. Dr. M. L. Morris read his address. . . . (Applause.) (To be published.)

. President Bower resumed the chair. . . .

PRESIDENT BOWER: Thank you, Dr. Morris.

The next on the printed program will be a discussion on "Studies on Derriengue," by Dr. Fernando Camargo, on "Studies on Derriengue," by Dr. Fernando Camargo,
Bacteriologist, Department of Animal Health, National
University of Mexico, Mexico City. (Applause.)
... Dr. Fernando Camargo read his address. (Paper
to be published.) Dr. Camargo then showed motion

pictures. . . .

QUESTION: How extensive and widespread is this among cattle?

DR. CAMARGO: It is in more than twelve states [of Mexico] on the Pacific Coast.

QUESTION: What is the morbidity and mortality?

DR. CAMARGO: One hundred per cent.

PRESIDENT BOWER: Just about like rabies.
QUESTION: By what route was the virus injected?
DR. CAMARGO: Intralingual.

QUESTION: The tongue?

DR. CAMARGO: Yes.

QUESTION: Is there any rise in temperature?
DR. CAMARGO: No rise. We took the temperature in about 500 sheep that had been inoculated experimentally but we did not have any rise in temperature.

QUESTION: Are any other animals susceptible? Dr. Camargo: Yes, the horse and sometimes the pig.

PRESIDENT BOWER: Thank you, Dr. Camargo.

Gentlemen, you will see that this is a form of encephalitis due to a filtrable virus, evidently related in some way to our rabies. When I was in Mexico last summer and again this summer, I was informed by our colleagues there that this disease is gradually moving north. Although they advised me that it had not yet reached the border, you can see the potentialities of the disease, the danger of introducing the disease into the United States. That is one reason why I was particularly interested in having Dr. Camargo, knowing that he was doing research work on this disease, present his studies Dr. Johnson in Alabama has been working on ase in connection with rabies work. Dr. Johnson to you. this disease in connection with rabies work. Dr. Johnson told me last winter, when I visited his laboratory, that he was then making a comparable study with rabies in dogs.

I wish to take this opportunity to thank our colleagues in the Republic of Mexico for this fine piece of re-

search that they have just presented to us.

The next is a panel discussion on brucellosis. W. L. Boyd will be chairman, Will the panel begin to assemble as I call their names? Dr. Case; Dr. Hendershott; Dr. Hutchings; Dr. Jensen and Dr. Lothe. Dr. Wight, I believe, is not here. While the panel is assembling, is Mr. Will J. Miller

in the room? Would you come forward, Mr. Miller? Gentlemen, I wish to present to you our latest honorary member of the American Veterinary Medical Association, Honorable Will J. Miller, livestock sanitary commissioner of Kansas. (Applause.)

Mr. Will J. Miller: Dr. Bower, Distinguished Gentlemen here at the head table, Ladies and Gentlemen, and I think I can call you my friends because that certainly was manifested so gallantly last night: I want the privilege now of thanking you from the bottom of my heart for an honor that I never hoped to attain and, through the kindness of you gentlemen, I am now one of you, and I am very, very happy.

I just want to say one word because I know you are more interested in the discussion on brucellosis than you are in what I have to say, but I think that I owe it to you, as many of you do not know what has gone before. I want to say what a great help your president and your past president, Dr. Charles Bower, were in this reclassification and the securing of the appropria-tion for the federal veterinarians and lay inspectors. tion Dr. Hardenbergh did a grand job, as did our Honorable Dr. Gillie of Congress.

I do want to pay the veterinary profession of the nited States, especially the AVMA today, a com-United States, pliment and tell you that you are highly complimented, in view of the fact that 105 livestock organizations of this country, 10 of them with resolutions unanimously passed in their livestock association meetings, endorsed the work, so to speak, of the veterinary profession of the United States. It was the easiest job I had. Most of it was done by long distance phone from Washing-ton, all over this country. The only criticism I had was from two smaller associations I did not know were in existence, who complained that we did not give them the same opportunity that we did these 105.

I want to say that you had the endorsement of the livestock industry, which stands first as an industry in this country-agriculture does-and, besides that, you had endorsement of the southwestern states and Republic of Mexico at their meeting in June, seven days before this vote was taken, at which time telegrams con-taining the resolution adopted were sent to every one of the Subcommittee on Appropriations of the Agricultural Committee.

I feel that you gentlemen are to be highly complimented on this fine endorsement from the livestock industry of this country.

My friends, I thank you again and again, and from now on I will be known as your friend "Will." Thank you. (Applause.)

President Bower: I now turn the session over Chairman W. L. Boyd. (Applause.) (Panel Discussion on brucellosis to be published.) I now turn the session over to

. . . Dr. W. L. Boyd assumed the chair. . .

Fifth General Session

Thursday Afternoon, August 24, 1944

Le fifth general session convened at 2:15 p. m., President Bower presiding.

AESIDENT BOWER: It is my pleasure to introduce to you Dr. Thorp of State College, Pennsylvania. He will discuss "The Newer Sulfonamides in Veterinary Practice."

Dr. Thorp! (Applause.)
. Dr. Thorp read his address. . . (Applause.) (To be published.)

PRESIDENT BOWER: We will now have the pictures

The following moving picture was shown:

"Life History of the Rocky Mountain Wood Tick,"
by the United States Public Health Service Laboratory, Hamilton, Mont.

PRESIDENT BOWER: I wish to take this opportunity to express appreciation to the Committee on Motion Picture Library for making available these pictures for this convention. As you probably know, there is now

established a Motion Picture Library, and some of these pictures will be available for state associations or other associations. I would like to ask, however, that any individuals or any institutions that have motion pic-tures and would care to have duplicates made, to con-tact the AVMA office. We would like to build up a nice motion picture library in the AVMA office. I am sure we would all profit therefrom.

sure we would all profit therefrom.

In addition to that, before passing on, I would also like to call to your attention the radio broadcasting activities which our Public Relations Committee has worked out during the convention this year. Under the chairmanship of Dr. Young, we have a total of 18 broadcasts scheduled during the meeting. That is about three times as many as when the convention met here years ago. Those who live in the midwest may to tune in on a special series of postconvention two years ago. broadcasts which will be made next week on the "Dinner Bell" program of station WLS. These programs will be on the air between 11:30 and 12 noon all next week be on the air between 11:30 and 12 noon all next week from Monday through Saturday. They principally con-cern the veterinarian's part in postwar America. I believe you will find all of them worth listening to. They have all been transcribed this week, during the convention, and the station is ready to use them next

We will go ahead with the printed program, "Differ-ential Diagnosis of Respiratory Diseases of Fowl," by Dr. J. P. Delaplane, College Station, Texas. (Applause.) . . Dr. J. P. Delaplane read his address. . . (Ap-

plause.) (To be published.) PRESIDENT BOWER: We will next pass on to "Specific Diagnosis and Chemotherapy of Avian Coccidiosis," by Dr. P. P. Levine, Ithaca, N. Y.

. . . Dr. P. Levine read this address. . . (Applause) (To be published.)

PRESIDENT BOWER: We will pass on to the panel on Poultry Diseases. Chairman Cliff Carpenter and his panel will please come forward as I read their names. Dr. Delaplane; Dr. Levine; Dr. Lubbehusen; Dr. Martin; Dr. Neuzil; Dr. Pomeroy and Dr. Winton,

. Dr. Cliff D. Carpenter assumed the chair. (Panel Discussion on Poultry Diseases to be published.) . . . President Bower resumed the chair. . . .

PRESIDENT BOWER: The time has now come when we must give the authority to the men that we elected the other day to direct the AVMA for the ensuing year. I shall call the names of the officers and, as they hear

their names, will they please come to the platform?

First of all, Dr. Wegner, would you escort President-Elect Farquharson to the platform?

. . President-Elect Farquharson was escorted to the platform. . . .

PRESIDENT BOWER: Is Dr. W. A. Barnette in the room? (Absent.) He is First Vice-President. Is Dr. Charlie Donham, Second Vice-President here? (Absent.) Is Dr. M. O. Barnes, Third Vice-President, here? (Absent.) Is Dr. F. H. Suits, Fourth Vice-President, here? (Absent.) Dr. J. A. Campbell, Fifth Vice-President? (Absent.)

Of course, we know that Dr. Simms was not here when he was elected unanimously as president-elect, but I am happy to say we have a telegram from him. was notified by wire and he replied as follows:

Sorry I am not with you to express in person my thanks and sincere appreciation of great honor bestowed upon me. Pledge my best efforts to uphold highest standards and traditions of Association and profession.

In absentia, by authority vested in me as president, I do hereby declare Dr. Simms installed as presidentelect for the ensuing year. Also, I declare the five vice-presidents, in the order in which I read them, installed as vice-presidents for the ensuing year.

DR. WEGNER: Mr. President, in accordance with your

instructions, I present Dr. Farquharson.

PRESIDENT BOWER: Thank, you, Dean Wegner.

Dr. Farquharson, truly the climax of my tenure of office as president of this association has been reached, when the time has come, and it is my privilege and I assure you my sincere pleasure, to install you as president for the ensuing year.

For twenty-five years we have been neighbors. You have worked in a state adjoining me. I have known you in college; I have seen you work in school; I have seen you work in practice, and I have seen you work at many, many state associations. I know that, from

your training, you are going to have a career that will be hard to match by any president. Therefore, Dr. Farquharson, I hand you this gavel which is symbolic of the rights and privileges that are extended to you as president of the American Veterinary

Medical Association.

May the Almighty God bless you, strengthen you, give you the courage and guidance and the wisdom to earry on as president of the American Veterinary Medical Association and direct it for the ensuing year. (Applause.)

The attendance at this meeting is an enthusiastic ex-pression of appreciation and the highest tribute to the splendid leadership of our retiring president, Dr. Bower. He has unselfishly devoted his whole energies to the duties of the office of president of the AVMA. Ale has duties of the office of president of the AVMA. Ale has given a helping hand to all groups who needed help; he has encouraged, by his presence, the work of all constituent organizations, giving full consideration to the varied interests of all branches of the profession which he represents. His unselfish devotion to our interests, his complete disregard of his own sacrifices of time, money and comforts, during a period when travel en-tailed so many trying and disagreeable inconveniences; his splendid committee organization, and forward-looking program, have brought great credit not only to him as an individual but to the great organization of which he

I feel that I can speak for the entire membership of the Association when I say that his administration has been one of the most outstanding ones in the history of the AVMA and that we owe him undying gratitude for this masterly accomplishment.

I shall seek his counsel during the trying year which lies ahead, knowing full well that his interest in the problems is not waning merely because he is retiring

problems is not waning merely because he is retiring from the office of president.

We thank him for his unflagging devotion and again commend him for his wise and capable administration, I congratulate you, Dr. Bower, on behalf of the American Veterinary Medical Association, on a heavy job that has been well done. (Applause.)

I know that the session has run overtime, and I will not keep you long. I would just like to give you a few highlights of some of the objectives for which I think the AVMA should stand.

. . . President Farquharson read his inaugural address. (Applause.)

I will now entertain a motion for adjournment.

DR. H. PRESTON HOSKINS: I so move. . . . The motion was regularly seconded. . .

PRESIDENT FARQUHARSON: It has been moved and seconded to adjourn the Eighty-first Annual Meeting of the American Veterinary Medical Association. Those in "aye"; opposed. The meeting is adjourned. favor say sine die.

. . . The meeting adjourned at 6:05 p. m. . . .

Business Sessions

First Session, House of Representatives August 21, 1944

The first session of the House of Representatives of the American Veterinary Medical Association, held in con-nection with the Eighty-first Annual Meeting and War Conference at the Palmer House, Chicago, Ill., August 21.22, 1944, convened at 7:30 p. m., President Charles W. Bower presiding.

PRESIDENT BOWER: The House of Representatives of Eighty-first Convention of the American Veterinary Medical Association is now in order.

Dr. E. A. Grist (Tex.): If it is in order, I would like to represent Dr. Roberts. He has not been able to appoint anyone, and I would like to represent him until he arrives.

PRESIDENT BOWER: It is in order, Dr. Grist.

Gentlemen, I hope you all consider that this is a very serious session. You are the voice of the membership pertaining to business. I hope that your votes, your considerations, your deliberations at these sessions will consist of the wishes of your state. I do not think that consist of the wishes of your state. it is necessary for me to tell you that votes should not be based upon your personal feelings but should be based upon the wishes of the state which you are representing.

I hope that all of you have read the preprints of the committee reports that were mailed to you. I hope that all of you have had a chance to discuss these preprints with members, particularly officers, of your state associations or constituent associations of the AVMA. If you have, then you will be in better position to vote the consensus of the state you are representing.

The first order of business will be the roll call. will ask the secretary to call the roll by states, and will the delegate please stand and state his name as his state is called?

The Roll Call

Executive Secretary Hardenbergh called the states alphabetically, and the delegates or alternates responded.

PRESIDENT BOWER: Next will be the presentation of the minutes of the 1943 session.

Presentation of Minutes

EXECUTIVE SECRETARY HARDENBERGH: Mr. President and Delegates: I herewith present the official transcript of the Eightieth Annual Meeting in St. Louis, August 25-26, 1943, together with the published minutes which

appeared in the October, 1943 issue of the Journal President Bowen: What is your pleasure? Do you wish to accept the minutes as published?

Dr. T. O. Brandenburg (N. Dak.): Move to accept

as published.

DR. C. P. ZEPP (N. Y.): Second.

PRESIDENT BOWER: Motion made and seconded that they be accepted as published. Any remarks? If not, all in favor of the question signify by saying "aye"; contrary the same. Carried.

We will now have the report of the Executive Board by Chairman O. V. Brumley.

Report of Executive Board

DR. O. V. BRUMLEY: Mr. President, the Executive Board, at its meeting today, passed ce consideration, some for your information. passed certain items for

PUBLICATION OF DIRECTORY

The first one is for your information. It was voted that the 1945 directory contain the alphabetical listing of

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the members of the Association, in addition to a listing by states. In other words, it was voted to list them both ways in the next directory, which we hope will be satisfactory to all the members. That is simply for your information.

MEMBERSHIP MATTERS

Some more information for the House, which needs no action, in regard to membership matters. It was voted to drop 196 members for non-payment of dues for the

past three years.
Second, it was voted to accept the resignations of 18 members. Next, objections having been received to the application of Dr. Charles R. Robinson and, after review by the Executive Board, the application was rejected. That is also for your information.

APPOINTMENTS TO RESEARCH COUNCIL

It was voted that the following be reappointed to the Research Council:

Edward Records—Bacteriology and Immunology George H. Hart—Biochemistry and Animal Nu-

James Farquharson—Large Animal Medicine E. T. Hallman—Pathology H. H. Dukes—Physiology and Pharmacology

The terms of these gentlemen had expired, and they are reappointed, for terms of three years.

HONORARY MEMBERSHIP NOMINATION

The next item is for your information and action, the action to be taken tomorrow evening. It was voted to recommend Mr. Will J. Miller of Kansas for nomination as an honorary member of the American Veterinary Medical Association. Dr. Hardenberg will, at this time, present the citation in connection with that recommendation.

. . Executive Secretary Hardenbergh read communica-tion received from Dr. R. R. Dykstra under date of June 20, 1944, following which he read a biographical

DR. BRUMLEY: This is simply for your information. The matter will come up for final action tomorrow evening.

COMMITTEE ON MILK HYGIENE

The next item we have to present from the Executive pard is the following: There were three members of Board is the following: There were three members of the New York State Veterinary Medical Society who appeared before the Board this afternoon, in which they discussed the question of having a Committee on Milk Hygiene set up, to be composed of three members, to work in conjunction with the Public Relations Committee. I might say that the Executive Board discussed this question, and it is recommended to the House of Representatives for consideration and action. The Executive Board recommends that a Committee on Milk Hygiene be set up, composed of three members, this committee to work in conjunction with the Public Relations Commit-This is now before you, Mr. President, for consideration.

PRESIDENT BOWERS: What is your pleasure in regard to the establishment of this Committee on Milk Sanita-

Dr. A. A. Husman (N. Car.): I move we accept the recommendation of the Executive Board.

PR. I. S. McAdory (Ala.): Second it.
PRESIDENT BOWER: Moved and seconded that we accept the recommendation of the Executive Board.

DR. R. J. SNYDER (Pa.): Do I understand that is to work in relation with the Committee on Public Relations?

DR. BRUMLEY: In conjunction with the Public Relations Committee. That was the action taken by the

Executive Board. EXECUTIVE SECRETARY HARDENBERGH: I think the explanation for Dr. Snyder is, there are certain public relations aspects of the matter as presented by the New York State members.

PRESIDENT BOWER: If there is no further discussion, those in favor signify by saying "aye"; contrary the same. Carried.

PROPOSED AMENDMENTS TO THE BY-LAWS

Dr. Brumley: The Executive Board wishes to present the action taken on the proposed amendments to the Constitution and Administrative By-Laws.

I would like to mention Proposal No. 1, which reads: Amend article II of the Constitution so that it will read: "The objectives of the Association shall be to advance the science and art of veterinary medicine, includ-ing their relationship to the public health." It was voted It was voted by the Executive Board to recommend this for adoption.

PRESIDENT BOWER: You have heard the recommendation. What is your pleasure?

Dr. G. W. JENSEN (III.): Mr. President, I move that Proposal No. 1 to amend article II of the Constitution be adopted.

PRESIDENT BOWER: Is there a second?

DR. R. A. HENDERSHOTT (N. J.): Second the motion. PRESIDENT BOWER: It has been moved and seconded that the proposal be adopted. Any remarks? If not, all those in favor signify by saying "aye"; contrary the same. Carried.

DR. BRUMLEY: Now we go to Proposal No. 2 which reads: Amend article IX, section 3, subparagraph (b), section 4, subparagraph (d) and section 5 of the Administrative By-Laws so as to change the words: "National Association of Bureau of Animal Industry Veterinarians" to "National Association of Federal Veterinarians" wherever the former designation, or abbreviations thereof, occur. I might say that is purely for the purpose of clarifying the By-Laws, as the name of the federal organization has been changed. The Board voted to recommend this for adoption.

PRESIDENT ROWER: What is your pleasure?

PRESIDENT BOWER: What is your pleasure? DR. HUGH S. CAMERSON (Calif.): I so move.

DR. B. E. CARLISLE (Ga.): Second it.

PRESIDENT BOWER: It has been moved and seconded that the recommendation be adopted. Are there any remarks? All in favor signify by saying "aye"; contrary the same. Carried.

DR. BRUMLEY: We have additional amendments to administrative By-Laws proposed and published in the AVMA JOURNAL for three consecutive months, for final action in 1944, as provided by section 3, article XIII of the Administrative By-Laws.

Amend article XII, section 1. "2. Committee on Education" so that it will read as follows:

"a) Personnel.—This committee shall consist of seven members, appointed by the president at the rate of one

members appointed by the president at the rate of one one member of the committee shall be appointed member years. One memoer of the committee shall be appointed from each of the following branches of weterinary science; (1) teaching staff of a veterinary college accredited by the association, (2) federal veterinary service, (3) United States Army Veterinary Corps, (4) large animal practice, (5) small animal practice, (6) full-time research in an educational institution of higher learning, (7) public health-resuries. lic health service. This committee shall elect a chairman and a secretary who will each serve for two years, or until their successors are elected and qualified. In the event of a vacancy resulting from death, resignation, or disqualification from any cause, the president shall fill such vacancy by appointment of a successor from the same classification to serve the unexpired term.

"b) Duty.—It shall make at least a biennial inspection

of all accredited veterinary colleges to investigate veter-inary education, including preveterinary, undergraduate, and graduate study, enrollment, clinics, physical plant, equipment, and faculty; suggest means and methods for improvement of the same and cooperate with the college officials in realization of these objectives in progressive, higher educational standards; and, upon request, examine veterinary colleges seeking accreditation by the Associa-tion. A copy of such inspection, report, and suggestions to the sent to the dean of the veterinary school and to the president of the college or university.

"c) It shall submit annually a list of such colleges as

are recommended for accreditation by the Association and make a report on the status and needs of veterinary education as conducted in the existing veterinary colleges; on the relation of veterinary education to animal production; and on the number of qualified veterinarians re-

quired to maintain a competent veterinary service."

The Executive Board voted not to recommend this for adoption. A committee of three is to be appointed by the Executive Board to redraft this proposal and have it presented at a later date.

PRESIDENT BOWER: You have heard the recommenda-tion, not to adopt proposal 3. What is your pleasure?

DR. A. A. HUSMAN (N. Car.): I move we sustain the Executive Board in their recommendation.

Dr. I. S. McAdory (Ala.): Second it.
PRESIDENT BOWER: Moved and seconded that the recommendation of the Executive Board be sustained. Are there any questions?

DR. HENDERSHOTT: I had one question. I read over this thing, and I would like to have a definition of public health service as applied in this particular item.

DR. BRUMLEY: Mr. President, that is one question the Executive Board would like to have cleared up, also, and one of the reasons out of several others for having one of the reasons out of several others for having this matter studied and given further consideration and another report made. There seems to be throughout the profession, I think, some question about this public health service. Therefore, I think that can be looked into and cleared up. That is one of the things that will be done when the next report comes in.

DR. HUGH HURST (Utah): I would like to ask if it is feasible or desirable to add some phrase that will

represent the poultry interests in connection with that.

President Bower: I think that is a suggestion that can probably be received by the committee that will study this further. Any other questions or further discussion? Are you ready for the question? All those in favor of sustaining the Executive Board, not to recommend this proposal 8, signify by saying "aye"; contrary the same. Carried.

DR. BRUMLEY: Now we go to Proposal No. 4: Amend article XII, "Committees-Standing and Special" by adding the following:

"11. Committee on Registry of Veterinary
"a) Personnel.—This committee shall consist of Committee on Registry of Veterinary Pathology members, one of whom shall be appointed annually by the president for a term of three years. The first mem-

the president for a term of three years. The first membership shall be appointed for one, two, and three years, respectively, for terms expiring in the same order. The president shall appoint the chairman.

"b) Duties.—It shall be the duty of this committee to collaborate with the proper officials in the establishment and maintenance of a registry of veterinary pathology in the Army Medical Museum. The committee shall, from time to time, make recommendations for the conduct of this work, on the part of the Association, for the purpose of developing the scope and usefulness of the regis-

try."
The Executive Board voted to recommend this for adoption.

PRESIDENT BOWER: What is your pleasure?

DR. R. A. HENDERSHOTT (N. J.): Mr. President, I move that the House of Representatives sustain the action of the Board in their action on this particular item.

DR. A. A. HUSMAN (N. Car.): Second the motion.
PRESIDENT BOWER: It has been moved and seconded that the House of Representatives sustain the recommen-dation of the Executive Board on Proposal No. 4. Is there any discussion?

. . . The question was called for . . .
PRESIDENT BOWER: The question has been called.
All those in favor signify by saying "aye"; contrary the same. Carried.

DR. BRUMLEY: Mr. President, that concludes the report of the Executive Board at this time. I might say that it will be necessary for the Executive Board to have another meeting tomorrow, and tomorrow night there will be further items to present to the House of Representa-

PRESIDENT Brwer. You have heard the several recommendations of the Executive Board, and you voted on them. Do you wish to vote on accepting the report in its entirety? If so, the Chair will entertain a motion.

Dr. A. A. Husman (N. Car.): I move we accept it.

Dr. G. W. Jensen (III.): Mr. Chairman, this report

is not complete. Why not wait until tomorrow night to vote on the entire report of the Executive Board?

PRESIDENT BOWER: If that is your wish.

The next order of business will be the report of the Executive Secretary.

Report of the Executive Secretary

To the Members of the Executive Board and House of Representatives:

The following report covers the period from Aug. 1, 1943, to Aug. 1, 1944.

MEMBERSHIP

On Aug. 1, 1943, the official membership was 7,704. During the year, 734 applications were listed in the Jour-NAL and 14 delinquents returned to good standing, a total gross increase of 748. During the same time, 289 members have been lost, leaving a net increase of 466 as shown in the following recapitulation:

Total as of Aug. 1, 1943	
Delinquents returned to good standing	
	8,452
Lost by death 68	
Lost by resignation 18	3
Lost by delinquency196	282
Membership as of Aug 1 1944	9.170

Of the 734 membership applications, 548 or nearly 75 per cent were from graduating classes in recognized schools; the remaining 186 were received from veteri-narians located principally in the United States, Canada and Mexico.

Honor Roll .- No new names are added this year to the standing for 50 years. The complete list of honor roll members numbers thirteen, as follows:

L. H. Howard (Amer. '82), Brookline, Mass., admitted

H. P. Eves (U. P. '87), Wilmington, Del., admitted 1889.

J. W. Connaway (Chi. '90), Columbia, Mo., admitted 1890.

Walter Shaw (Ont. '81), Dayton, Ohio, admitted 1890. N. S. Mayo (Chi. '91), Highland Park, Ill., admitted 1891. B.

Ackerman (Amer. '91), Huntington, L. I., admitted 1891.

Charles R. Borden (Amer. Vet. College '92), Taunton, Mass., admitted in 1892.

William H. Dodge (Amer .Vet. College '89), Leomins-Mass., admitted in 1892. H. D. Hanson (Amer. Vet. College '89), Darien, Conn.,

admitted in 1892. John B. Hopper (Amer. Vet. College '92), Ridgewood,

admitted in 1892,

J. Payne Lowe (Amer. Vet. College '91), (National Vet. College '93), Passaic, N. J., admitted in 1892.

Bernhard P. Wende (Ontario Vet. College '93), Buffalo, N. Y., admitted in 1892.

L. A. Merillat (Ont. '88), Chicago, Ill., admitted in

Deaths.-From Aug. 1, 1943, to Aug. 1, 1944, the names of 68 deceased members have been reported to the central office. They are:

Albery, George Allen, Frank E. Anderson, Horace L. Ashcraft, D. W. Babson, Elmer W. Baver, A. F. Billhymer, W. V. Bradley, Charles A. Burby, J. W. Bryans, Joseph W. Cain, Charles B. Casper, George T.

Church, Harry R. Claire, J. F. Corliss, J. R. Dickson, R. C. Drolet, Bernard J. Edenburn, Frank L. Elliott, R. G. Forsberg, Philip P. Garner, Pau Gibbs, C. E. Paul C. Glover, Albert D.

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Goodman, L. J.	Patterson, R. C.
Guldner, R. C.	Port, Harry D.
Halloran, John L.	Redmon, J. T.
Hartman, Geo. R.	Ricebarger, Benjamin I
Harz, Hubert H.	Robinson, Thomas E.
Hernsheim, J. T.	Romberger, E. E.
Huston, Sherbern S.	Scott, F. A.
Imler, F. A.	Sharp, Walter E.
lackson, Frank B.	Shaw, I. H.
Jackson, Wm, P.	South, Roy F.
Jacobs, Joseph	Stark, Herman
lensen, Thomas J.	Stephenson, Roy L.
Kelly, Wm, Henry	Stewart, Walter C.
Kral, James	Super, D. H.
Lenheim, Edw. H.	Tow, Addison
Lockett, Stephen	Walch, C. I.
McKercher, Arthur	Walsh, Frank E.
Massinger, Eber M.	White, David S.
Massinger, Wesley	Whitehouse, A. W.
Mattehsw, T. McCrae	Wood, Emlen
Moser, Herman L.	Yokum, Dale
Nebeker, Shirley	Young, Clarence J.

Resignations.—The resignations of 18 members have been accepted by the Executive Board. Ten of these gave no reason, 6 were because of retirement, 1 on account of increased dues and 1 because of "no benefit from the Association," although a member for 37 years.

Distribution of Membership.—An accompanying table shows the membership by geographical areas. California continues to lead the states with 591. New York is second with 546, and Illinois third with 480.

PAYMENT OF DUES AND DISTRIBUTION OF MEMBERSHIP

-16.0	Paid	Paid	Paid	
State, etc.	1044	1043	1942	Total
Alabama	. 99	15	6	120
Arizona	26	1		27
Arkansas	35	3	7	45
California	533	34	24	591
Colorado	125	8	5	138
Connecticut		1	4	83
Delaware		4		27
Dist. of Columbia	52		3	55
Florida	97	5	6	108
Georgia	114	5	4	123
Idaho	39	1	2	42
Illinois	432	23	25	480
Indiana	272	17	27	316
Iowa	379	14	26	419
Kansas	228	27	22	277
Kentucky	72	4	8	84
Louisiana	57	6	7	70
Maine	37	2	1	40
Maryland	110	3	3	116
Massachusetts	125	9	7	141
Michigan	295	16	15	326
Minnesota	217	13	11	241
Mississippi	44	4	7	55
Missouri	204	12	14	230
Montana	41	1	2	44
Nebraska	125	6	12	143
Nevada	20	4.5		20
New Hampshire	26	1	3	30
New Jersey	180	9	10	199
New Mexico	28	1	2	31
New York	470	33	43	546
North Carolina	94	4	4	102
North Dakota	46	2	3	51
0111	392	14	28	434
Oklahoma	98	- 3	7	108
Oregon	88	**	5	98
Pennsylvania Rhode Island	323	20	7	350
C 1 C	16	**	4	20
C The second	48	5	9	62
/p	48	2	4	54
T	67	2 .	4	73
rexas	313	28	33	373

	Paid	Paid	Paid	
State, etc.	1944	1943	1942	Totals
Utah	49	2	3	54
Vermont	25	3	3	31
Virginia	116	6	5	127
Washington	175	5	8 -	188
West Virginia	32	2	8	37
Wisconsin	204	6	14	224
Wyoming	31	1	2	34
Subtotal	748	883	451	7,582
Possessions, Foreign and Miscellaneous				
Alaska	1	* V		1
Possessions	23	3	1	27
Canada	163	5	7	175
Mexico	19	1		20
· South America	50	3	4.0	53
Other Foreign,	23	1		24
APO	169	17	18	204
Honorary	23			23
Special Cases	61		9.0	61
Subtotal	532	30	26	588
Grand total7.	280	413	477	8.170

II. FINANCES

The report of the treasurer will give a detailed account of the financial status of the Association. During the fiscal year ending June 30, 1944, the secretary's office transmitted receipts of \$103,568.47 to the depository banks and vouchered expenditures of \$82,882,90, an excess of receipts over expenses of \$20,685.47. Examination of the figures presented by the treasurer will reveal that income from all sources was larger than in any previous year; also, the increase in total assets. The considerable gain was the result of larger receipts than had been estimated from two principal sources: advertising in the official JOURNAL and dues. The increased income from advertising was largely on account of more advertising accounts and less on account of the increased rates which became effective Jan. 1, 1944. The full effect of the higher rates will not be felt until the present fiscal year.

Total expenditures for the year somewhat exceeded budget estimates but controllable expenses were kept within budget limitations with few exceptions. As a result, the Association is healthy and strong, financially speaking. Sound fiscal policies should be continued but with due regard for such financial outlays as may be necessary to support and expand the activities of the Association and to implement projects required by the times and the spe-cial problems that confront the profession.

III. Publications

The official Journal now has a circulation in excess of 9,000 monthly or about 1,000 more than last year. Government restrictions on paper continue to be more severe and require us to limit the Journal to 96 pages A recent federal order reduces the weight of paper stock which can be supplied by the mills on future

In spite of handicaps, the editorial department has improved its publication schedule for manuscripts con-siderably. The large backlog of accumulated papers has been so reduced that much more prompt publication of manuscripts can be offered contributors to both the regular and research journals.

The American Journal of Veterinary Research has increased in circulation slightly during the past year in spite of the war, the subscription list now being about 1,800 as compared with 1,500 last year. The subscriptions to the Journal also more than carried its costs this year, compared with a small deficit previously.

year, compared with a small deficit previously.

The excellent cooperation of the members of the Research Council in reviewing manuscripts, prior to acceptance, is again gratefully acknowledged. The thorough and impartial attitude which the council members display in passing judgment on, and making constructive criticisms of, papers is the best evidence of the importance with

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which they view the standing of the RESEARCH JOURNAL. Without their advice and assistance, the responsibility of maintaining the high standards and scientific worthiness of the Journal would be most difficult.

Veterinary Science Newsletter .- Dr. Merillat has continued to prepare material monthly for the Office of War Information which goes in multigraphed form to foreign countries which have little or no access to veterinary literature because of war conditions. OWI has repeatedly emphasized the value of this material and the fine recep-tion which "Veterinary Science Newsletters" are given in many lands.

Membership Directory .- According to past schedules, a new directory should be published in 1945. Nearly one new girectory should be published in 1945. Nearly one thousand new members have been admitted since the 1943 edition was printed and there have been hundreds of address changes, many of which are temporary because of the war. Although present conditions may be far from ideal for the issuance of a new edition, yet it is believed that it is almost necessary because of the constant demand for the date sectors of our membership.

for up-to-date rosters of our membership.

The budget for 1944-45 includes an item for the proposed edition which may be limited because of paper restrictions; because of the present size and cost, it is no longer given to the entire membership gratis but can be made available at a nominal price sufficient to cover actual expenses of printing.

If possible, the value and usefulness of the new directory will be greatly increased by the inclusion of several new features such as: a directory of state veterinary examining boards; digests of or complete reproduction of the veterinary practice acts of the various states; data on livestock population figures by states for each species; the number of licensed veterinarians by states, etc.

IV. THE EXPANDING RELATIONSHIPS AND RESPONSIBILITIES OF THE ASSOCIATION

review of the agenda for the sessions of the House of Representatives at this annual meeting reveals the extent to which the Association interests and activities have developed. Ten standing committees, 23 special committees, and 8 representatives to other organizations have submitted reports of their work for the year. It is possible that we are over-developed on committee assignments, in some respects, to an extent that it is impossible, pracin some respects, to an extent that it is impossible, practically speaking, to activate all of the recommendations that are presented for adoption. In order not to lose the benefit of the hard work done by our committees, it is believed that the responsible officers of the Association should study ways and means of more effectively carrying out the activities which are approved when the committee reports are adopted. Of special importance are committee reports are adopted. Of special importance are the liaison relationships with organizations in the related fields of livestock production and conservation, and with the National Research Council through the Committee on Animal Health. Opportunities for veterinary science and the veterinary profession to exert their influence and guidance in economic and public health undertakings were never more plentiful nor urgent.

V. EXECUTIVE BOARD ELECTIONS

Two new members of the Executive Board take their places at the conclusion of this meeting. In district 4, B. E. Carlisle of Camilla, Ga., succeeds W. E. Cotton of Auburn, Ala., for a 5-year term ending in 1949. Dr. Cotton has represented his district since 1989. In district 10, W. E. Krill, Columbus, Ohio, succeeds O. V. Brumley. Dr. Brumley terminates nearly 15 years of continuous service to the Association as an elective officer, having been on the Executive Board from 1930 to 1936, president-elect and president, respectively, in 1937 and 1938, with a second term on the Executive Board (1939 to 1944) of which he was chairman for the past four years. This constitutes a splendid record of responsible leadership during some of the most important years of the Association's growth and expansion of activities.

VI. PUBLIC RELATIONS

The past year has witnessed the most effective and farreaching program ever attempted by the Association. The

several regular features of the work (weekly releases to several regular teatures of the work (weekly releases to four principal news services, bi-weekly releases to farm papers and livestock journals, monthly releases to extension editors, monthly mailings of "Farm Radio Briefs" to farm radio editors, and special releases as indicated) were augmented by a series of radio broadcasts handled by 32 state veterinary associations during the first six months of 1944. The coverage of the United States was almost complete and, taking the public relations work as a whole, it is believed that livestock and poultry growers were made more conscious of the value of qualified veterifamiliar, to a considerable extent, with the need for competent veterinary advice; the big job which remains to be done is to gain greater appreciation of the veterinarian and his work by the general public, particularly in urban and metropolitan areas.

VII. WOMEN'S AUXILIARY

Demands upon the Student Loan Fund of the Auxiliary Demands upon the Student Loan Fund of the Auxiliary for which the central office acts as agent, have been few during the year because of the ASTP program in veterinary education. However, since that is terminating, there will probably be a renewal of loan applications from senior students. The Auxiliary as of Aug. 1, 1944, had a net worth of \$6,665.05 of which \$3,792.80 is cash in the

VIII. MAIL AND CORRESPONDENCE

Mail i																		,	-	_	,,
Letters																					
Various	Pul	olica	ati	io	n	ß,	e	te	,			9									1,854
Packages									8		*		6					0.7			1,353
Total																					28,3

During the same period, over 175,000 pieces were mailed or addressed from the central office, as follows:

First class	mail.														*		38,949
Third class	mail .										 						18,683
Packages				* 1			. ,										10,001
Journals (A	VMA.	&	A	J	V	R)) .								0		108,646

No report within reasonable limitations can portray the manifold activities and duties of the central organization in carrying out the programs and services for which the Association is obligated to individual members and the profession as a whole. We are indebted to many members and committees for their valued assistance and the unstinted support and cooperation of all officers. The Executive Secretary expresses his grateful appreciation to all these and to other loyal associates and employees for

helping to carry on the work. Respectfully submitted, J. G. HARDENBERGH, Executive Secretary.

PRESIDENT BOWER: You have heard the report of the Executive Secretary. What are your wishes?

DR. I. S. McAdory (Ala.): I move it be accepted as

DR. A. A. HUSMAN (N. Car.): Second the motion.
PRESIDENT BOWER: It has been moved and seconded that the report be accepted as read. Is there any discussion? Are you ready for the question? All those in favor signify by saying "aye"; contrary the same. Carried.

Next will be the report of the treasurer. Is Dr. Lacroix in the room? (Absent.)

We will take up next the report of the Committee on Education. I presume all of the delegates have read the preprints. Would you like to make any explanation, Dr. Hallman?

Report of Committee on Education

T. HALLMAN: I don't believe so, President

Bower. We haven't anything additional to report.

PRESIDENT BOWER: If there are any questions to ask
the chairman, I am sure he would be glad to enlighten

you on any part of the report that is not clear. You will notice by the report that there was a school in-spection made and that, at the conclusion of the report, there is a list of the accredited schools.

DR. R. A. HENDERSHOTT (N. J.): Mr. Chairman, if it is in order, I move the adoption of the report of the Committee on Education.

DR. G. W. JENSEN (Ill.): Second it.

PRESIDENT BOWER: It has been moved and seconded that the report of the Committee on Education be adopted. Are there any remarks? Are you ready for the question?
All those in favor of the adoption signify by saying "aye"; contrary same. Carried.

(All reports not appearing in the Proceedings will be published in the November, 1944, issue of the JOURNAL.)

Report of Committee on Public Relations

Committee on Public Relations. Chairman Schlotthauer, do you have anything to add or any remarks on this

committee report?

DR. C. F. SCHLOTTHAUER: I hope that the group will read this report and see the large number of nice mentions we have had. Of course, all the work of the Public Relations Committee would be lost were it not for the efforts of every man here to carry on and do the things that are commendable for the profession. Public relations is not a matter of any committee or group but it is a matter for everyone to take hold of and do. If we can't do anything commendable, for heaven's sake let's not do anything that is the opposite because uncom-mendable things are the things that really get the widest publicity.

PRESIDENT BOWER: Have any of you questions to ask Dr. Schlotthauer relative to his report on Public Relations?

DR. HUGH S. CAMERON (Calif.): I move its adop-

DR. R. A. HENDERSHOTT (N. J.): Second it.

PRESIDENT BOWER: It has been moved and seconded that the report on Public Relations be adopted. Are there remarks? All those in favor signify by saying "aye"; contrary the same. Carried.

You will notice we are skipping down through the

reports of the committees as printed on the program. The reason for that is that the Executive Board had a very long day today and they were not able to go over all of these reports carefully. We are passing on to you tonight those that have been reviewed. The others will be held over until the next session.

Report of Special Committee on Nomenclature of Diseases

The next will be the report of the Committee on Nomenclature of Diseases, Is Chairman Kernkamp in the room. or any member of his committee? (Absent.)

DR. HENDERSHOTT: I move the adoption of the report.

DR. McADORY: Second the motion.

PRESIDENT BOWER: It has been moved and seconded

DR. D. COUGHLIN (Tenn.): I wonder if that committee should be continued or should not be continued. There is a great deal of work here, and I think it should be carried on.

DR. HENDERSHOTT: I would include that in my motion, that the committee be continued.

PRESIDENT BOWER: Is that all right with the second? DR. McADORY: Yes.

PRESIDENT BOWER: The motion is that the report be adopted and the committee be continued. Are there any remarks? All those in favor signify by saying "aye"; contrary the same. Carried.

Report of Special Committee on Interstate Shipment of Livestock by Truck

The next is the Committee on Interstate Shipment of

Livestock by Truck, Dr. Franks is Chairman. Chairman Franks, have you anything further to report, or any explanation you would like to give the delegates?

DR. C. C. FRANKS: Nothing, Mr. Chairman, other than that it was the consensus of opinion of the committee that it was not a very propitious time to do very much about it.

Dr. D. *COUGHLIN (Tenn.): Mr. Chairman, I move the report of this committee be adopted, and the committee continued, because there is a lot of work to be done.

Dr. R. A. HENDERSHOTT (N. I.): Second it.

PRESIDENT BOWER: It has been moved and seconded that the report of the Committee on Interstate Shipment of Livestock by Truck be accepted and the committee be continued. Are there any remarks? All those in favor signify by saying "aye"; contrary. Carried.

Report of Committee on Diseases of Dairy Cattle

The next is Diseases of Dairy Cattle. Is Chairman Bryan in the room or any member of the committee? Dr. Seagraves, do you have any information that you would like to give the delegates?

DR. CHAS. H. SEAGRAVES: I think it is rather well covered.

PRESIDENT BOWER: You have all studied this report, I am sure.

DR. J. V. KNAPP (Fla.): I move the adoption of the report.

DR. A. A. HUSMAN (N. Car.): Second it.

PRESIDENT BOWER: Moved and seconded that the report of the Committee on Diseases of Dairy Cattle be accepted. Do you wish to include the continuation of the committee?

Dr. KNAPP: I think so, yes,

PRESIDENT BOWERS: Does that meet with the approval of the second?

DR. HUSMAN: Yes.

PRESIDENT BOWER: The motion is that the report of the Committee on Diseases of Dairy Cattle be accepted and the committee continued. Are there any remarks?

DR. R. A. HENDERSHOTT (N. J.): Mr. President, I made several notes on this report. With particular reference to the control of brucellosis, it says: "With introduction of strain 19 Brucella vaccine, several programs are available for the control of brucellosis in dairy herds. It is essential that veterinarians acquaint themselves thoroughly with the various aspects of vaccination and the blood-test plans officially approved in their state." When reading that, it occurred to me that it might have been well, in the light of experiences that most of us in regulatory work are having, to again call to the attention of the veterinary profession that in our Code of Ethics, paragraph 6, we have a very good paragraph that might he read by members of the profession, to their advantage and enlightenment. I would like, for the purpose of the record, to again call the attention of the veterinary pro-fession to that paragraph headed "Professional Deportment" in our Code of Ethics, which reads as follows: "Paragraph 6.-Members shall comply with the common law governing their obligations to their clients and shall obey without obvious fault the official public regulations and laws governing their acts." If we could, somehow or other, amend this committee report to specifically call this to the attention of the members of our profession, there might be remote hope that we would be able to obtain from the members that are using these products some cooperation in making reports to the livestock regulatory officials, as provided by law.

Then farther on in the same paragraph: "If brucellosis is to be controlled in any dairy, it requires the close cooperation of the farmer and the veterinarian." I would like to amend and add thereto "and the employment of good sanitary practices." I noted that in the next column they go to some length in stressing the necessity for sanitation in taking care of calf scours in our dairy animals but neglect to make mention of the employment of sanitary practices in connection with control of brucellosis. I wondered why it had been left out in one instance and stressed in the other.

Then farther on in that same page, at the bottom, it has this to say: "Mange, both psoroptic and sarcoptic, in dairy cattle has in the past year or two become an important problem in many dairy sections. The U. S. Department of Agriculture, realizing this fact, stated: "Common scab, once widespread and serious," has been almost eradicated, but sarcoptic scab, once rare, is now becoming a real menace." This is the part I have particular reference to: "Veterinarians observing this condition should report it to the proper state regulatory official." I would like to have that particular part in the item underscored. Later on, we are going to have something to say about the reporting of infectious communicable diseases to livestock regulatory officials.

Then, on the next page, in connection with milking machines and the control of mastitis: "Procedure—(1) The cow should be properly prepared for milking by wiping and massaging the udder with an individual cloth soaked in a warm chlorine solution." I think that at the present time we have some disinfectant agents that are far superior to chlorine solution, and if we left that wide open and said "warm disinfectant" perhaps it would serve the purpose much better and leave it to the individual to select his disinfectant, or give him chlorine solution and industrial zephiran as a choice. I object strenuously to the next sentence which says: "One cloth may be used in a herd if it is allowed to remain in the chlorine solution between each use on the cows." I am of the firm opinion we might just as well stop kidding ourselves about putting a cloth laden with manure back in a chlorinated solution, expecting it to become sterile in the time that we go from one cow to the next. By that paragraph, I think we simply kid ourselves. It would be far better if we stated that, preferably, one cloth should be used for each udder, and that cloth then be discarded, rather than that it be placed back in the chlorinated solution to be re-used on the next animal.

Again in paragraph 4 where reference is made to chlorine solution, I would again offer a substitute of either chlorine or preferably roccal. I am not engaged by the Cioa Pharmaceutical Products, Inc., or the Winthrop Chemical Company, to plug their products. We simply find it much better. Then, again: "This solution should not be used for rinsing cups for more than 10 to 20 cows." I wonder why we shouldn't use the solution for rinsing cups for more than 10 to 20 cows in one instance, and why we could use the same solution and put an old, dirty, cloth into the disinfectant between cows. The logic of the thing doesn't appeal to me at all.

In paragraph 5 it says: "Careful, but not prolonged, stripping of cows should be practiced, particularly in those cows suffering from chronic mastitis. Most normal cows prepared and milked properly will require little, if any, stripping." I wonder why, particularly in cows suffering from chronic mastitis. I don't know why we couldn't stop there, put a period after "be practiced" and be done with it.

In paragraph 6, again, I would suggest that chlorine or roccal solution be recommended rather than that we push chlorine solution for this particular work.

In paragraph 8: "Cows in the herd should be examined carefully and classified, so that diseased cows are segregated and milked last." I wonder what the definition is of a diseased cow, in this instance. I think the committee would have done well to have been specific in that regard and stated whether it was the cow that was carrying Streptococcus agalactiae or some other bacterial infection of the udder, or whether it was a cow that had a grossly diseased udder, one that could have been detected on physical examination.

That is all the comment that I have in connection with the report.

PRESIDENT BOWER: Dr. Hendershott, did you wish to make this as an amendment to the motion? You know, there is a motion before the House to adopt this report.

DR. HENDERSHOTT: If it would be possible for the committee, if the committee is here, to go over and amend this, I would like to see this turned back to the com-

mittee with some suggestions as to amendment, and let them amend it and return it to us, if possible. I don't know whether that committee is here or not.

PRESIDENT BOWER: Dr. Seagraves, you are representing the committee.

Dr. Seagraves: As far as I am concerned, the report could be very greatly reduced in composition. I think, perhaps, it was unnecessary for us to elaborate upon principles of sanitation that the profession well knows anyway, regarding calf scours and even Bang's disease. Some of those points that Dr. Hendershott brought out are well founded.

I think if the report is sent back, in the interest of paper conservation, it ought to be greatly reduced.

About that udder cloth, I am not so sure that we should use a cloth or disinfect the teats at all, because, as a matter of fact, in practice, out in the hills, where some farmers don't know anything about cloths and don't use them, they don't have any mastitis. If a cloth isn't properly used, it is a bigger hazard and liability to the herd than if they are not touched with it.

DR. HENDERSHOTT: I want to subscribe wholeheartedly to Dr. Seagraves' statement about the cloth. If you are not going to make the proper use of a cloth, I agree with you, leave it alone. So that I, too, subscribe to that, Dr. Seagraves. If you are not going to do it right, don't make a pass at doing it.

PRESIDENT BOWER: Are there further remarks? . . . The question was called for . . .

PRESIDENT BOWER: The question has been called. The motion before the House is that the report of the Committee on Diseases of Dairy Cattle be accepted and the committee continued. All those in favor signify by saying "aye"; contrary the same. The "ayes" have it.

Report of Diseases of Beef Cattle

We will pass on now to Diseases of Beef Cattle. Is Dr. Kingman in the room? Any member of the committee? Dr. Miller, have you any information further than is in the report that you would like to give to the delegates?

DR. MILLER: I don't believe I have at this time.

PRESIDENT BOWER: If there are any questions the delegates wish to ask Dr. Miller, I am sure he will be glad to answer them. What is your pleasure?

Dr. W. A. BARNETTE (S. Car.): I move it be accepted and the committee continued.

DR. A. A. HUSMAN (N. Car.): Second it.

PRESIDENT BOWER: Moved and seconded that we adopt the report and continue the Committee on Beef Cattle. Any questions? All those in favor signify by saying "aye"; contrary the same. Carried.

Report of Committee on Diseases of Swine

Diseases of Swine. Is Chairman Doyle here? Any member? (Absent)

Dr. R. C. Klussendorf (Wis.): I move that the report of the Committee on Diseases of Swine be adopted and the committee be continued.

DR. A. A. HUSMAN (N. Car.): Second the motion.

PRESIDENT BOWER: Moved and seconded that the report of the Committee on Diseases of Swine he adopted and the committee be continued. Any remarks? All those in favor signify by saying "aye"; contrary the same. Carried.

Report of Committee on Humane Act Award

Next is the Committee on the Humane Act Award. Is Chairman Young in the room? (Absent) The committee has been working the past half year on selecting a recipient for this award, and they have selected one. It will be announced and the award will be given tomorrow at the opening session. What is your pleasure with the report of the committee?

Dr. Hugh S. Cameron (Calif.): I move it be accepted.

DR. HENDERSHOTT: I second the motion.

PRESIDENT BOWER: Moved and seconded that the report of the Committee on Humane Act Award be accepted, Any remarks?

Dr. G. W. Jensen (III.): Should not this committee be continued?

PRESIDENT BOWER: What is your pleasure?

DR. JENSEN: I would amend the motion and move that the committee be continued.

DR. CAMERON: I will accept that,

DR. HENDERSHOTT: I will second that.

PRESIDENT BOWER: We will put it in the original motion. The motion as it now stands is that the report be accepted and the committee continued. Any remarks? All those in favor signify by saying "aye"; contrary the same. Carried.

Committee on National Board of Examiners

Next will be the Committee on National Board of Examiners. Chairman Krill, have you any remarks?

DR. W. R. KRILL: Mr. President and Members of the House: A year ago at the meeting of the House of Representatives I brought up the question about the licensing of veterinarians in the various states and, as so frequently happens, it boomeranged and I found it back in my own lap.

During the past year it has been impossible to get the entire committee together. It has been a very represensative committee, I think. They have all been rather busy. I only had an opportunity to discuss this matter with some of the members of the committee at the United States Livestock Sanitary Association meeting. At that time, we exchanged a few ideas and felt that possibly the first thing we should do would be to get an expression of opinion from some of the leaders in our profession and to contact the state veterinarians and find out whether there was a need for such a national board.

We sent out a letter, as the report indicates, and the replies that we got are tabulated there, and some of the objections that were brought up to the national board are given. Some of the men were very emphatic that there was a definite need for a National Board of Veterinary Examiners.

On the other hand, there were many of them that were equally as emphatic that we did not need such a national board. There were some of them evidently afraid that we were pulling a New Deal stunt and were assuming or infringing upon the individual state's rights. I appreciated all the replies that I got. Unfortunately, we didn't hear from all, and we didn't expect to hear from all.

During our delving into the records of the Association, Dr. Merillat happened to remember that some years ago in California there was a committee appointed to study the advisability of a National Board of Veterinary Examiners. Dr. Hurt was made chairman of that committee, and he is here tonight. That committee drew up a plan, and it was presented, I think, to the Executive Board in about 1936. For some reason, it was never brought to the Association's attention. I have not been able to find out exactly why, whether they thought it wasn't quite time for such a thing at that particular time, or what it might have been, I don't know.

We also contacted many of the other professions and found out the workings of their national boards, how they were set up. We found that this report incorporated most of the ideas that go into the workings of a national board of examiners.

Not having had an opportunity to get the whole committee together and thresh this out, we did not feel that we should present any plan of the working of a board of this kind, but we did feel that this report of Dr. Hurt and his committee, into which we know he put a lot of work and effort, might give the delegates here some knowledge of what a national board would consist and how it would operate, and it would give you something concrete to take back to your organizations and to discuss with them.

You will notice we made a recommendation that this report be taken to your various constituent organizations and studied. This is too important a question to decide hurriedly. We want it thoroughly discussed, and we want the members to feel free to express their opinions, and any action that is taken will represent the best thinking of our whole organization and all the members. For that reason, we have recommended that we wait, take this home and study it, and next year be in position to decide whether or not we want a National Board of Examiners. Then, if we do decide on a National Board of Examiners, there should be some money provided for a committee to get together and study and thresh it out and set up a plan to be acted upon at some later date.

I might say that I have contacted quite a number of the professions that have national boards. I also find that in pharmacy, instead of having a national board, they have a board of reciprocity, in which they decide upon and make provision for reciprocal arrangements among states.

I feel that this is a very important question that you men have to decide. I am sorry we haven't anything more concrete to give you at this time, but I do believe that you have some idea, from this report, what a national board will consist of, and I hope that you will take this seriously and take it up with your associations and, when you come back next year, that you will be in position to discuss it.

DR. HENDERSHOTT: Mr. President, I move you that the report of the National Board of Veterinary Examiners Committee be taken under advisement and that each of the delegates from the states take it back to their constituency and let them decide which way we should vote on this.

It doesn't make a great deal of difference whether we have a national veterinary examining board or whether we elect to go the way we have heretofore, but I do think that, for those engaged in the field of private practice, there is much in here that needs serious consideration and deep thought before we commit ourselves one way or another.

I feel that we who are going to vote for it from our various states should, at the same time, be in a position to go back home and accept it. I don't believe that any of us should vote for or against it unless we are committed to whatever way we vote in our own respective states. If we are going to support it here, then, all right. If we in New Jersey support you, I hope that we in New Jersey will accept the decision of the National Veterinary Board, and I think every state should be in a position to do that, and that our study and decision should be made with that thought in mind. I do think it needs serious thought.

PRESIDENT BOWER: In other words, Dr. Hendershott, you would move that the report be accepted, because they make that recommendation in there.

Dr. Hendershoff: That is fine. Then we will come back next year and fight about it.

PRESIDENT BOWER: You wish to have this committee retained for another year?

DR. HENDERSHOTT: I would suggest that this committee be retained and continue its labors for another year.

PRESIDENT BOWER: There might be additional information they would gather. Any further remarks?

DR. A. A. HUSMAN (N. Car.): Second the motion.

PRESIDENT BOWER: It has been moved and seconded that the report on the National Board of Veterinary Examiners be accepted and the committee continued. Ready for the question? All those in favor signify by saying "aye"; contrary the same. Carried.

Report of AVMA-AAHA Committee on Foods

The next will be the report of the Committee on Foods by Dr. Hardenbergh.

EXECUTIVE SECRETARY HARDENBERGH: I have nothing more to present, Mr. President. There are other members of the committee here who might want to comment.

DR. R. C. KLUSSENDORF (Wis.): I move that the remittee be continued.

DR. HENDERSHOTT: Second the motion.

PRESIDENT BOWER: It has been moved and seconded that the report of the Committee on Foods of the American Animal Hospital Association and the AVMA be ac cepted and the committee continued. Any remarks? All those in favor signify by saying "aye"; contrary the same. Carried.

Report of Advisory Committee on Veterinary Medicine, Procurement and Assignment Service

The next will be the report of the Advisory Commit-tee on Veterinary Medicine, Procurement and Assignment Service. Chairman Hardenbergh, have you any further remarks?

EXECUTIVE SECRETARY HARDENBERGH: Nothing further, Mr. Chairman.

PRESIDENT BOWER: What is your pleasure about the report?

DR. B. J. KILLHAM (Mich.): I move that the report be accepted. I don't think we have to do anything about the committee. That is taken care of,

DR. I. S. McADORY (Ala.): Second the motion.

PRESIDENT BOWER: Moved and seconded that the report of the Advisory Committee on Veterinary Medicine, Procurement and Assignment Service, be accepted. Are there any remarks? All those in favor signify by saying "aye"; contrary the same. Carried.

Report of Representative to Advisory Board, Horse and Mule Association

Now the reports of representatives. The Advisory Board, Horse and Mule Association of America. Dr. Sigler, have you anything further to add to your report?

DR. T. A. SIGLER: No. I think the Secretary has some letters in regard to activities of the Horse and Mule Association in prescribing some medicine. These were copies made from papers printed in the Drovers Journal, by a man in the Department of Agriculture. I have them down in the room. I will turn them in to you tomorrow. You have all that printed, haven't you?

EXECUTIVE SECRETARY HARDENBERGH: We have the report here, Dr. Sigler.

DR. SIGLER: That is all I had to add.

PRESIDENT BOWER: What is your pleasure?
DR. HENDERSHOTT: I move the report be adopted and the representative be continued.

DR. McADORY: Second it.

PRESIDENT BOWER: It has been moved and seconded that the report on the Advisory Board of the Horse and Mule Association of America be accepted. Any remarks? All those in favor signify by saying "aye"; contrary the same. Carried.

Report of Representative to the AAAS

Next is the American Association for the Advancement of Science. Is Dr. Giltner in the room? (Absent)

DR. B. J. KILLHAM (Mich.): I move that the report be accepted.

DR. HUSMAN: Second it.

PRESIDENT BOWER: It has been moved and seconded that the report be accepted. Any remarks?
.. The question was called for....

PRESIDENT BOWER: The question has been called. All

those in favor signify by saying "aye"; contrary the same. Carried.

Report of Representative to the National Livestock Conservation Program

Next is the report on the National Livestock Conservation Program, Chairman Hardenbergh.

Dr. HENDERSHOTT: I move that the report be adopted.

DR. HUSMAN: Second the motion.

PRESIDENT BOWER: It has been moved and seconded that the report be adopted. Any remarks? All those in favor signify by saying "aye"; contrary the same. Carried. All those in

Report of Representative to National Poultry Advisory Council

The next is the National Poultry Advisory Council.

DR. HENDERSHOTT: I move the report be adopted.

DR. McADORY: Second it.

PRESIDENT BOWER: Moved and seconded that the report be adopted. Any remarks? All in favor signify by saying "aye"; contrary the same. Carried.

Report of Representative to National Research Council (Division of Biology and Agriculture)

Is Dr. Dukes in the room? (Absent)

DR. CAMERON: I move the acceptance of the report.

DR. HUSMAN: Second it.

PRESIDENT BOWER: Moved and seconded that the report be accepted. Any remarks? All those in favor signify by saying "aye"; contrary. Carried.

Report of Representative to the National Research Council (Division of Medical Sciences)

Is Dr. Eichhorn in the room? (Absent)

DR. KNAPP: I move the adoption of the report.

DR. JENSEN: Second it.

PRESIDENT BOWER: Moved and seconded that the report be adopted. Those in favor signify by saying "aye"; contrary. Carried.

Report of Representative to the Pet Animal Industry Advisory Committee of WFA

The report of the Pet Animal Industry Advisory Committee, War Food Administration, Chairman Hardenbergh.

DR. HENDERSHOTT: I move the report be adopted.

Dr. McADORY: Second it.

PRESIDENT BOWER: Moved and seconded that the report be adopted. Any remarks? All those in favor signify by saying "aye"; contrary the same. Carried. Gentlemen, that concludes the committee reports and

reports of representatives that we have available. Is there any unfinished business? Has anybody anything they want to bring up?

DR. HUSMAN: I move we adjourn.

DR. McADORY: Second the motion.

PRESIDENT BOWER: It has been moved that we adjourn. Tomorrow night there will be another meeting of the House in this room at 8 p. m.

. . . The meeting recessed at 8:53 p. m. . . .

Morale is that state of mind that urges men and women to give all they've got to achieve an objective: like buying War Bonds, for instance.

Second Session, House of Representatives August 22, 1944

The second session convened at 8:30 p. m., President Bower presiding.

PRESIDENT BOWER: Gentlemen, we will come to order. There is a quorum present. We will dispense with the roll call. There have been one or two additions, but they have been verified by the secretary.

The first thing at this session will be to complete the report of the Executive Board by Dr. Brumley, chairman.

Report of Executive Board

DR. O. V. BRUMLEY: Mr. President, the Executive Board has several items here that it wishes to present to you.

1945 MEETING PLACE

First of all, in regard to the meeting invitations for 1945. It was voted by the Executive Board that the next meeting be held in Chicago, if conditions permit, and the type of meeting that is to be held is to be determined at the Board meeting in December.

You may think it rather strange about the Executive Board voting to meet in Chicago again, but I think a little explanation by the executive secretary will clear that situation.

EXECUTIVE SECRETARY HARDENBERGH: Gentlemen, the Kansas City Veterinary Medical Association extended an invitation last year for the 1945 meeting to be held in Kansas City. Dr. Bower and I were there two weeks ago to meet with the local group and to survey the facilities for the meeting, including hotel and convention facilities, and things of that sort. We spent an evening with the local group, discussing the general situation. The invitation still stands, but it is the practically unanimous opinion of the Kansas City group that, under present conditions, involving travel and hotel accommodations in that city, it would hardly be feasible for them to entertain us next year in a way that would do credit to them and the type of meeting the AVMA likes to have.

So, while they have not reneged on their invitation, they will not feel badly if we don't accept it.

Dr. Brumley: Thank you very much, Dr. Hardenbergh. During this war period I think you can understand the problems connected with holding a meeting of this kind. So, the chances are that we will meet in Chicago next year, or until the war situation clears up.

PUBLIC RELATIONS COUNSEL

The next item to report is the action taken on the Public Relations program and publicity proposals for the coming year. There were two companies who made proposals to the Executive Board. The Board, after giving the matter very careful consideration, voted that Mr. L. R. Fairall be retained for the ensuing year. It is believed that he has been doing very excellent work in the way of publicity. Therefore, we thought it would be advisable to continue him since he understands the various matters connected with the program at this particular time. That is just a matter of information to you.

HONORARY MEMBERSHIP NOMINATION

We come to one other matter in regard to honorary membership nomination. You will recall that, last evening, the Honorable Will J. Miller of Kansas was nominated for honorary membership, and a citation was presented. According to the By-Laws this is now before you for consideration.

PRESIDENT BOWER: Action on this will come later. -

REAPPOINTMENT OF EXECUTIVE SECRETARY AND EDITOR

Dr. Brumley: The next item I wish to present at this time: It was voted to re-employ Dr. Hardenbergh as Executive Secretary and Managing Editor, and Dr. Merillat as Editor-in-Chief for the ensuing year. That is simply for information.

EXECUTIVE BOARD CHAIRMAN

Another matter for your information is that Dean W. A. Hagan was elected Chairman of the Board for the ensuing year.

Those are the only items at this time.

PRESIDENT BOWER: You have heard the report of the Executive Board. What is your pleasure?

DR. G. W. JENSEN (Ill.): Mr. President, I move that the report of the Executive Board be accepted.

DR. HENDERSHOTT: Second the motion.

PRESIDENT BOWER: It has been moved and seconded that the report of the Executive Board be accepted. Any remarks? If not, are you ready for the question? All those in favor signify by saying "aye"; contrary the same. Carried.

Report of Special Committee on Diseases of Sheep

We come to the report on Diseases of Sheep. There is a representative of that committee here, Dr. Frederick. Do you have any remarks, Doctor?

Dr. L. D. Frederick: I might say briefly, for the assemblage, that there have been a few projects that are not reported in the committee's report, namely, those of close coöperation with the National Livestock Conservation Committee in outlining their conservation program, and close coöperation in the endeavors of the National Livestock Loss Prevention Board. Also, members of your committee and others in this audience have helped us by attending meetings and offering suggestions of guidance to other groups, such as the Livestock Sanitary Committee at Sioux City. They are very active in trying to prevent losses in sheep in that country, they having definite parasite problems and nutritional problems in that territory.

We discuss parasitic diseases in the report. In addition to what we have said in the report, I might inform you there are several projects now, trying to find efficient teniacides for the removal of fringed tapeworms from lambs. Other than that, I think the report covers everything very well.

PRESIDENT BOWER: Are there any questions or remarks on the report? The Executive Board has taken action on this report, and it will be read by the chairman.

DR. BRUMLEY: Mr. President, all I have to say is that the Executive Board approved the report as written.

DR. HENDERSHOTT: I move the report be adopted, and the committee be continued.

DR. McADORY: Second it.

PRESIDENT BOWER: It has been moved and seconded that the report be approved and the committee be continued for another year. Any remarks? Those in favor signify by saying "aye"; contrary "no." Carried.

Report of Budget Committee

The next will be the report of the Budget Committee. Your presiding officer happens to be the chairman of that committee. I will ask Executive Secretary Hardenbergh to read it.

Report of Committee on Budget (For Fiscal Year 1944-1945)

Receipts

200007.0	
AVMA FUND	
Dues (50%)\$	26,000.00
Directory	500.00
Emblems and Keys	250.00
Exhibits-Convention	4,000.00
Fees-Convention	1,500.00
Miscellaneous	1,000.00
Reprints	1,500.00
Reprints	1,000:00
*	34,750.00
Journal Fund	
Advertising	21,500,00
	26,000.00
Subscriptions	6,500.00
Subscriptions	0,000,00
	54,000.00
RESEARCH JOURNAL	
Subscriptions	3,500.00
Total Estimated Receipts\$	92,250.00

Expenses

AVMA	
Audit	\$ 600.00
Bank Service Charges	
Committee Travel & Exp	
Convention	
Directory	
Emblems and Keys	
Furn. & Fixtures	
Ins. & Surety Bonds	
Legal	
Miscellaneous	
Postage	
Publicity	
Rent & Light	
Reporting	250.00
Reprints	1,500,00
Salaries	
Stationery & Off. Supp	
Taxes	
Tel. & Tel	
Travel	
Twelfth Int, Cong. Prize	125.00
a district and conf.	
	\$66,650.00
50%	33,325.00
CANADA CONTRACTOR CONT	

AVMA JOURNAL

a comme 2	D C. 20 24 26 W.			
Cuts &	Etchings.		******	 .\$ 1,200.00
Envelop	CS			 . 500.00
Paper .				 . 4,200.00
Printing				 . 15,000.00
50% of	AVMA	Expense		 . 33,325.00
				\$54,225,00
RESEARCH	JOURNAL			\$04,820.00
Cuts &	Etchings			8 600.00

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Paper									*			*				*	*					*		*			500.00
Printing																											3,500.00

\$ 4,700,00 Total Estimated Expense......\$92,250.00

CHARLES W. Bower, Chairman

O. V. BRUMLEY J. V. LACROIX

JAMES FARQUHARSON J. G. HARDENBERGH PRESIDENT BOWER: Does the Executive Board have a report to make on the budget?

DR. BRUMLEY: Mr. President, I might say that the Executive Board has approved this budget as presented by the executive secretary.

You have heard the report of the PRESIDENT BOWER: Budget Committee. What is your pleasure?

DR. HUSMAN: Move it be accepted.

DR. McADORY: Second it.

PRESIDENT BOWER: Moved and seconded that the report of the Budget Committee be accepted. Are there any remarks? All those in favor signify by saying "aye"; contrary the same. Carried.

Next will be the report of the treasurer.

Report of Treasurer

(See opposite page for treasurer's report.)

PRESIDENT BOWER: You have heard the report of the treasurer. What are your wishes?

DR. A. A. HUSMAN (N. Car.): I move it be be accepted.

DR. I. S. McADORY (Ala.): Second it.

PRESIDENT BOWER: Moved and seconded that the report be accepted. Any remarks? All those in favor signify by saying "aye"; contrary the same. Carried.

The next will be the report of the Legislative Committee by Chairman Hardenbergh. All those in favor

Report of Committee on Legislation

EXECUTIVE SECRETARY HARDENBERGH: I have nothing to add, Mr. Chairman.

PRESIDENT BOWER: Did the Executive Board have anything to add?

DR. BRUMLEY: We approved it.
PRESIDENT BOWER: You have no remarks on the Legislative Committee?

EXECUTIVE SECRETARY HARDENBERGH: No remarks.

PRESIDENT BOWER: Do any delegates have any questions or remarks on the Legislative Committee?

Dr. D. Coughlin (Tennessee): At the bottom, recommendation calls for some provision to be made in the current budget to provide for a legislative information service through a suitable agency in Washington. Is that included in thebudget?

EXECUTIVE SECRETARY HARDENBERGH: Yes.

DR. COUGHLIN: I will move the report be accepted.

DR. McADORY: Second it.

DR. HENDERSHOTT: I have one question that I think needs clarification in regard to the report of the Legislative Committee, and that is with respect to the statement relative to Will J. Miller, Live Stock Commissioner of Kansas.

I don't know that it is generally known that Will Miller, a member of the Legislative Committee of the United States Livestock Sanitary Association, was asked by the officers of the Livestock Sanitary Association to interest himself in behalf of this legislation. I think included in this statement here should be not only that he is Live Stock Commissioner of Kansas but, also, as a member of the Legislative Committee of the United States Livestock Sanitary Association, whose interest he was looking after in this connection.

PRESIDENT BOWER: Any other remarks?

DR. HENDERSHOTT: I would offer that as an amendment to that report.

PRESIDENT BOWER: Is there a second to that amendment?

Dr. J. V. KNAPP (Fla.): Second it.

PRESIDENT BOWER: All those in favor of the amendment signify by saying "aye"; contrary same. Now we go back to the original motion that the report be accepted. Any further remarks? Those in favor signify by saying "aye"; contrary the same. Carried.

OCTOBER 1944

Financial Report-J. V. Lacroix, Treasurer

CASH RECEIPTS

July 1, 1943 to June 30, 1944

AVMA FUND (one-half of dues)\$	40,644.51
	58,102.04
Research Journal (subscriptions)	4,588.16
Special Fund No. 2 (interest on bonds)	137.50
Salmon Memorial Fund (interest on bonds)	96.26
Total Receipts	03,568.47
Less: Cash Disbursements	82,882.90
PAYANCE	20 695 57

CASH DISBURSEMENTS

July 1, 1943 to June 30, 1944

AVMA Fund\$	56,609.35
AVMA Journal	19,205.28
Research Journal	3,731.47
Special Fund No. 2 (Twelfth International Veterinary Congress Prize)	137.50
Relief Fund (transferred to general fund)	3,199.30
Total Disbursements	82.882.90

BALANCE SHEET

June 30, 1944

NET WORTH

AVMA Fund	\$ 66,441.49
Journal Fund	11,448.78
AVMA Special Fund No. 2	5,000.00
Salmon Memorial Fund	5,638.79
Research Fellowship Fund	1,000.00
Manual Manual	* 90 E90 06

COMPARISON OF FUNDS

July 1, 1943 to June 30, 1944

	June 30		Increase
	1944	1943	(Decrease)
AVMA Fund\$6	6,441.49	\$54,101.66	\$12,339.83
Journal Fund 1		******	11,448.78
AVMA Special Fund No. 2	5,000.00	5,000.00	
	5,638.79	5,542.53	96.26
Research Fellowship Fund	1,000.00	1,000.00	
Relief Fund		3,199.30	(3,199.30)
TOTAL\$8	9,529.06	\$68,843.49	\$20,685.57

The next is the Committee on Resolutions. Dr. Hendershott, I believe, is on that committee.

Report of Committee on Resolutions

Dr. R. A. Hendershott: Mr. President, Secretary, Dr. Brumley, and Members of the House: I am not the chairman of this committee. I have been asked by the chairman of the committee to serve in his place.

I might say, too, it was the hope of some of the members of this committee that an opportunity might be afforded the committee to get together here at Chicago and amend some of the verbiage of these resolutions. Perhaps we might have been able to do it this evening, but I understand this is the last session of the House, so we will have to do it here in the House.

Dr. Hendershott read Resolution No. 1, on death of David S. White. .

Do you wish to pass on these resolutions individually or collectively?

PRESIDENT BOWERS: What is your pleasure about that?
DR. COUGHLIN: Let's have them all.
. Dr. Hendershott read Resolution No. 2 relating to

importation of non-quarantined pet annimals. . . . Dr. B. E. Carlisle (Ga.): Inasmuch as some of

these other resolutions may be opened for discussion, move that the memorial resolution (No. 1) be passed, and the others acted on later.

President Bower: You have heard the motion. Is

there a second?
DR. HUSMAN: Second it.

PRESIDENT Bower: No discussion? All in favor signify by saying "aye"; contrary the same. Carried.

Dr. Hendershott read Resolutions 3, 4, 5 and 6...
I would like to stop right now and ask that we delete

that one.

to one.

... Dr. Hendershott read Resolutions 7, 8, 9 and 10....
I don't know whether these resolutions have the approval and signature of all members of the Resolutions Committee or not. Do you know, Dr. Hardenbergh?
You are a member of that committe. I also am a member.

EXECUTIVE SECRETARY HARDENBERGH: Didn't you have a meeting of your committee?

DR. HENDERSHOTT: There are only three members of the committee here. They are Dr. Walter Wisnicky, Dr. Hardenbergh and myself.

EXECUTIVE SECRETARY HARDENBERGH: To my knowledge, the final wording was never signed by all the members of the committee.

DR. HENDERSHOTT: There they are, gentlemen. I would

like to talk to some of them.

PRESIDENT BOWER: What is your pleasure? Do you wish to discuss these as a group? Is there a motion?

DR. A. L. BRUECKNER (Maryland): There were two

resolutions presented which mentioned vaccines and other dangerous products. I wonder if the committee would like to explain the difference between those two resolutions. One was Resolution No. 8 and I don't know what the other one was.

DR. HENDERSHOTT: Resolution No. 5 deals entirely with viruses, living bacteria in the nature of vaccines, and has to do with the unrestrained distribution of certain

potentially dangerous animal-disease producing factors.

Resolution No. 8 has to do with livestock remedies and vaccines. There is somewhat of a duplication there, in that vaccines are again mentioned in Resolution 8 as well as in No. 5. The only addition to Resolution No. 8, over and above that which is contained in Resolution No. 5, has to do with the livestock remedies.

No. 6 is dealing with a matter that is history. When

these resolutions were written, as you well know, it was the idea to get them in the hands of the executive secretary some time in April so that we might have them printed and included in the printed report for your consideration.

Since that time, the matter about which this resolution was written has been successfully consummated, so there is little need to include that one. I think everyone would agree to its exclusion.

Could I talk on this one as a member of the committee?

PRESIDENT BOWER: Yes.

DR. HENDERSHOTT: . . . off the record . . . DR. C. P. ZEFF (New York): Mr. Chairman, I would like to discuss Resolution No. 2. As I understand that, it is a resolution prohibiting bringing all dogs into the

States during the war period. Is that correct, all pets? Dr. Hendershott: Shall I read it again?

DR. Dr. ZEPF: Unless you know.
. Dr. Hendershott re-read Resolution No. 2. .

Dr. Zepp: At the present time we have no quarantine regulations for the importation of pets, or the return of pets or dogs, in particular. We will discuss the dog which may be taken over with the armed forces. Later, as Dogs for Defense have promised, that dog will be returned to the owner, detrained and returned to the owner. Since we have no quarantine regulations, that will mean that will not be able to be done, and the

Army will not be able to be done, and the Army will not be able to keep their promise.

DR. HENDERSHOTT: I would like to call for information for myself. I think at the present time the Bureau of Animal Industry maintains a quarantine on dogs imported into the country. Isn't that right, Dr. Hagan?

DR. W. A. HAGAN: No. The Bureau of Animal Industry has a principal statement. dustry has no jurisdiction over dogs.

Dr. Zepp: That was in existence following the last war and it was broken down because so many dogs came in. The quarantine regulations for dogs were taken away after the last war because of the undesirable effect holding the soldiers at the ports of debarkation. is one thing we have to give consideration to, because Dogs for Defense have made this promise. myself have examined a large number of dogs, and there has already been a large number which have been de-trained and returned to their owners, and they have not gone through quarantine.

The other angle we have to bear in mind, when we make this recommendation, is that most of our merchant marine crews are taking dogs along as companions to their point of destination. How long they stay and how long they remain off the ship, I do not know. But the dogs are being brought back. They, then, if they take the dogs as companions, and the captains of the ships are the ones that select the dogs for companions on their ships, will have to leave the dogs on the other

Aviators are flying back with pets continually. think we will need a good, strong police force to attempt to get these animals to the quarantine station. At least, the quarantine station would have to be set up, if we wanted to put this resolution through, since we do not have one. I think we are opening up a field here that is going to work on the sentiments of these soldiers.

I had a dog in the other day from a battalion, with

only three men left, who had promised that the last man would take care of the dog and take it back to the States. Would take care of the dog and take it back to the States.

I had one dog that had been on a raft for nine days.

The captain himself brought it in. We are going to open up a very sentimental field when we open it up from the angle of the pets alone.

I would like you to clarify what you mean by pets. They are bringing back cats and innumerable things.

DR, HENDERSHOTT: If you are asking me the answer to that, my interpretation would be it would take care of innumerable pets, cats, dogs, monkeys, parakeets.

Da. ZEPP: I think, before we do that, we should consider, through the Army, the Dogs for Defense problem, because we are likely to recommend something here that they have promised and they would either have to PRESIDENT BOWER: Gentlemen, you have heard the discussion on Resolution No. 2. What is your pleasure?

HENDERSHOTT: I would like to say a word on Resolution No. 2, because it is one of my own writing. This matter came to my attention sometime ago in news paper articles in which it was indicated that some of the men returning from foreign theaters of war, some of our own compatriots returning on the Gripsholm, were bringing back with them pets from the four corners of the earth. I was somewhat alarmed about the opportunity that was presented for these pets coming into the United States to serve as carriers of diseases non-existent in the country and serve as reservoirs of infection for spread of those diseases, possibly, to live-stock, pets, and other animals in the United States. I wrote to General Kelser in this vein (I am sorry

I don't have the correspondence with me) that some of us in the country were somewhat alarmed about it and it was my opinion that most of us were acquainted with the fact that he spent some time in residence in the Philippine Islands and was very well acquainted firsthand with the tropical disease situation there, and that we would be satisfied if we could have an assurance from him that there was no danger involved in bringing these animals into the country, and that, should be not be able to satisfy us or satisfy himself in this connection, I hoped he would take whatever action was appropriate and necessary to guard the interests of the animal population of the United States.

He immediately issued orders that no dogs he transported by the Army, and wrote me that he was sorry that his order had no weight in the Navy or the Marine Corps, and apparently had no weight with the

Air Forces.

I then addressed a letter to General H. H. Arnold, requesting the same kind of action from him, and he wrote that he was sympathetic with our viewpoint, from control of diseases of livestock the standpoint of the standpoint of control of diseases of livestock and pets, but he felt that, perhaps, there was some obligation on the part of the Army Air Corps to bring the dogs in, where men who had given their lives had previously struck up an acquaintance with dogs in the South Pacific, and where the parents of the boys had asked that the dogs be brought into the United States. of deference to the parents, when and if space was available on air transports coming back from that area, General Arnold was inclined to think he would bring the dogs in.

That looked like we did not get very far. So I wrote to the United States Public Health Service and brought this matter to their attention. As I understand it, they in tur's called a meeting of members of the Army and the Navy and the Bureau of Animal Industry and have this matter under consideration at the pres-

ent time.

What to do with regard to this problem? My personal feeling is this: that the war is going to cost our nation a large enough sum of money as it now stands. Nobody has any quarrel with that, but I think that we would justly criticized if, in addition to the necessary war debt, we saddled the American nation or American livestock industry or our pet industry, unnecessarily, with some diseases that we could very well do without.

I am inclined to the view that sentiment and disease control, while it would be nice if they could walk down the pathway of life together, band in hand, at times, perhaps, must part company, and that was very serious viewpoint of the situation. and that we should take

We have men in the South Pacific, and we have animals down in the South Pacific with which they strike up an acquaintanceship, an affiliation. Undoubtedly, a good many of them will want, either out of sentimental or souvenir reasons, to return to this country some of the monkeys or dogs or what have you from that area. I would want to be satisfied, I would think that everyone in veterinary medicine, whether it be small animal work would, too, want to be satisfied, in small animal work would, too, want to be satished, in so far as it is humanly possible, that these dogs have been examined and their health has been certified to by some recognized veterinary, regulatory and inspectional service such as, perhaps, the United States Bureau of Animal Industry or the Army veterinarians. the various services.

I think it is a good resolution. I think it is one that are wise to pass. I see no harm that could come we are wise to pass. I see no harm that could come from it, and I see where it may redound to our credit and to the credit of the livestock industry.

PRESIDENT BOWER: Are there further remarks?

DR. ZEPP: I would like to ask Dr. Hendershott if he doesn't realize these dogs have been coming in for years. They have been coming into the Port of New for at least twenty-five years that I have been in York, from various sections. You speak of the Gripsholm. I admit there are possibly more of them coming in now, but they have been coming in for at least twentyfive years.

I also would like to ask what diseases in particular he is referring to in the pets, in the dogs likely to come in here, that are not tropical diseases, particularly from that tropical section?

DR. HENDERSHOTT: I rather take from your remarks the tropical diseases would not sustain themselves in this

country when they are introduced.

Dr. ZEPP: When you have had the dogs coming in for at least twenty-five years, we have not had the prob-lem. Is it just a point now of trying to put the Army man on the spot for bringing in his pet, or do you consider it a much more serious condition at the present

DR. HENDERSHOTT: I am not acquainted with the fact there have been many importations from New Guinea or olomons or the Philippines or, for that matter, from

the Mediterranean area.

I do know that zoölogical specimens which have been brought into the United States have always gone into the quarantine station at Athenia, for I personally have gone over there and have seen them in that station. Of course, they are a type of animal that the Federal Bureau of Animal Industry apparently has jurisdiction over. I could not say as to what has come into the Port of New York with respect to dogs from these other areas. I would not think there have been many; certainly not a great number come in in that way, that is dogs that were indigenous to that area and brought into the country.

If the person was there and had DR. ZEPP: dog, he could bring it in, and they have been coming in.

Dr. Hendershoft: I have no knowledge of the number. You undoubtedly would be more acquainted with those that come into the Port of New York than

I would be.

PRESIDENT BOWER: Are there further discussion You have heard the discussion on Resolution No. Are there further discussions? What is your pleasure?

DR. HENDERSHOTT: I move its adoption.

DR. BRANDENBURG: I move we pass these resolution after deleting No. 8 and No. 6. PRESIDENT BOWER: You move that we pass all of them

after deleting No. 8 and No. 6.

DR. HENDERSHOTT: Second the motion.

PRESIDENT BOWER: Are you all familiar with what No. 8 is? It has to do with remedies and vaccines. remarks?

Dr. Hendershott: If the maker of the motion would allow an amendment, it would be that we also strike from the record any reference to Resolution No. 8.

PRESIDENT BOWER: Is that satisfactory with the

maker of the motion?
DR. BRANDENBURG: Yes.

PRESIDENT BOWER: That we delete No. 6 and No. 8 and strike from the record any comment on Resolution Do I hear a second?

DR. HENDERSHOTT: I second it.

I would like to make an amendment to ZEPP: that No. 2 that at least we delete that for the time being, until we find out as to the status of these dogs that have been sent over as Dogs for Defense, because they are promised to be brought back to their rightful owners.

PRESIDENT BOWER: You make an amendment to the

Dr. Zepp: Yes, 1 move to amend the motion that Resolution No. 2 be deleted or held up until we know our status in regard to Dogs for Defense, so we can inquire what the Army can do about the Dogs for Defense which they have taken from the owners and sent overseas and will be expected to return to the owners.

Dr. Hendershott: As a point of order, we have a motion before the House. Mr. President.

PRESIDENT BOWER: This is an amendment to the motion. Is there a second?

Dr. S-ANLEY PHILLIPS (Ore.): In discussion of the amendment, isn't it true the Dogs for Defense are under the direct supervision of the Veterinary Corps? So they would not now be included? Are they under the direct supervision of the Veterinary Corps?

DR. ZEPP: I work for Dogs for Defense quite a bit, and I know the owners were told this, when they were requested to give their dogs for Dogs for Defense, their dogs would be taken by the Army and returned to them, if well, and they would detrain them, so they wouldn't be vicious when they came back.
OR. PHILLIPS: I think that is correct.

Dogs for Defense have been the so-called K-9 Corps, which is under the direct supervision of the Veterinary Corps of the Army, in which case that would not be incompatible with the resolution as read. They are being

supervised by adequate veterinary service, in that case.

PRESIDENT BOWER: What is your pleasure on the amendment to the motion? Was there a second to the Apparently there is no second to the amendment? amendment?

DR. F. H. BROWN (Indiana): This Resolution No. 2 you speak of, why can't we leave that to the Bureau of Animal Industry?

DR. HENDERSHOTT: They have no jurisdiction.

DR. HENDERSHOTT: Iney have no jurisdiction.

DR. BROWN: They can get a disease without this as well as they can with it. If there is a danger, they certainly should be far-sighted enough to do it, and, if they don't, it won't be our funeral, it will be theirs. I personally think they will take care of it.

Just to eliminate the argument between whether they will see their results.

will or they won't, let's delete No. 2 and go on.
DR. HENDERSHOTT: May I answer that, please. It so happens that the laws of the United States that set up the Bureau of Animal Industry, having to do with their work, made no provision whereby they can, under circumstances, administer this act or do anything any relative to it.

Dr. Brown: On account of being dogs?

Dr. Hendershott: The dogs are not included in the definition of livestock. Therefore, the Bureau of Animal Industry has no jurisdiction whatsoever in connection with this matter.

The question has been called for PRESIDENT BOWER: on the original motion, to delete Resolutions 6 and 8. All in favor signify by saying "aye"; contrary the same. The resolutions are all passed with the exception of those two.

We will next turn to the report of the Committee on Registry of Veterinary Pathology, Army Medical Museum. Dr. Feldman, Chairman.

Report of the Special Committee on Registry of Veterinary Pathology, Army Medical Museum

Dr. W. H. Feldman read the report. . . . PRESIDENT BOWER: You have heard the report of Dr.

Feldman. What is your pleasure?

eldman. What is your pressure.

Dr. HENDERSHOTT: I don't know who is responsible to the forward step in veterinary medicine.

Dr. Bower, for this forward step in veterinary medicine. I think this is one of the splendid things that has come out of your administration, if you are responsible for it. As I calculate the arithmetic on this thing, it is going to cost each one of the members of this Association something like twelve-hundredths of a cent a year.

DR. HUSMAN: More than that.
DR. HENDERSHOTT: Twelve cents a year. Even at twelve cents a year, look at the opportunity there is for all of us to make use of that. As I understand it, Dr. Feldman, if we want a loan collection of slides out of the

Museum, we may be able to get them.

Dr. Feldman: Yes. The plan, of course, is to have a series of at least five sections made, so any man who is authorized may obtain, from the Director of the Army Medical Institute of Pathographic Course. Medical Institute of Pathology, slides for loan. Furthermore, as this collection grows, they expect to make up lantern slides of some special subjects, so if you have a lecture or something you want to give eventually, those lantern slides could be loaned to you.

DR. HENDERSHOTT: We also have an opportunity to send them histopathological specimens for diagnosis.

DR. FELDMAN: That is right, without cost.

DR. HENDERSHOTT: They are going to make up five loan collections?

DR. FELDMAN: Yes.

DR. HENDERSHOTT: Or they will have collections that

DR. HENDERSHOTT: Or they will have collections that are loaned or permitted to go out to five members.

DR. FELDMAN: They won't send all five.

DR. HENDERSHOTT: Who will be the special few who will be entitled to get these?

DR. FELDMAN: The chances are there will be such a large collection, no man will want fifty normal livers and fifty different species at one time.

DR. HENDERSHOTT: One might want some special

DR. HENDERSHOTT: One might want sections, say, of a sarcoma or something of that nature.

Dr. Feldman: They will be available. They have They have and, if they haven't the slides, they will cut them for you.

Dr. Hendershott: I move you the adoption, with our thanks to the committee and whoever is responsible for this step.

DR. HURST: Second that motion.

Dr., HUSMAN: I understand that carried a sum of \$500 and \$1,000. Has that been approved by the Executive Board and included in the budget?

PRESIDENT BOWER: That will come back to the Board.

Any further remarks?

The question has been called. All those in favor of the motion signify by saying "aye"; contrary the same.

DR. HENDERSHOTT: This committee, of course, will be continued.

PRESIDENT BOWER: This committee is a standing com-

DR. FELDMAN: It is a special committee.

PRESIDENT BOWER: The By-Laws have been changed,
PRESIDENT Bower a little late getting in.

Next will be the report of the Veterinary Biological

Products Committee.

Report of the Committee on Veterinary **Biological Products**

DR. BRUMLEY: Mr. President, the report on Biological Products has been approved by the Executive Board.

President Bower: You have heard the report of the Executive Board on this committee report. What is your pleasure?

DR. HUSMAN: I move it be accepted.
DR. HENDERSHOTT: Second it.
PRESIDENT BOWER: Moved and seconded that the report be accepted. All those in favor signify by saying "aye"; contrary the same. Carried.

Report of Committee on Proprietary **Pharmaceuticals**

DR. BRUMLEY: Mr. President, the Executive Board approved the preliminary and supplementary reports. There was a preliminary and a supplementary report. They were both approved.

Chairman Lacroix is here. I PRESIDENT BOWER: wonder if he would like to make some remarks. That supplementary report has not been printed. It might he would like to say something for the benefit of the

delegates.

DR. LACROIX: I would remark simply that I failed to contact two members of the committee who I understand were at this meeting. Consequently, this supplementary report which I submitted this afternoon before the Executive Board is my own and does not have the sanction of the other members of the committee.

PRESIDENT BOWER: Would the chairman care to elaborate on his own report?

Dr. Lacroix: I can read it, if they want to listen

to it.

PRESIDENT BOWER: What is your pleasure?

DR. HENDERSHOTT: Let's hear it.

DR. LACROIX: You have in preprint form the pre-liminary portion of the report. . . . Dr. Lacroix read the supplementary report. . . .

If I may, Mr. Chairman, I will explain that the Board of Governors, following my attempt to get off the hook on this job of chairman of the committee, a job

for which I am not qualified, rather urged me to con-tinue. Out of it has come this questionnaire. The questionnaire was mailed rather late, in part because of the sickness of one of the members of the committee. I simply hurried in the preparation of what I have here presented in the hope that I would meet a quorum of the committee and present it in regular form. I failed in

PRESIDENT BOWER: You have heard the report and, also, the supplemental report. What is your pleasure?

DR. McAdore: Move its adoption.
DR. HUSMAN: Second the motion.
DR. JENSEN: I move that the committee be continued.

PRESIDENT BOWER: It is a standing committee. . . . The question was called for. . . .

The question has been called. All those in favor signify by saying "aye"; contrary the same. Carried.

Report of Research Council

Next is the report of the Research Council. Hallman in the room? (Absent). You men read this. What is your pleasure?

Dr. Husman: Move it be accepted. Is Dr. You men have all

DR. HUSMAN: Move it be accepted.

DR. HENDERSHOTT: Second it.

PRESIDENT BOWER: Moved and seconded that the reresident Any remarks? All those in favor

Carried. port be accepted. Any remarks? All those in fa-signify by saying "aye"; contrary the same. Carried.

Report of Committee on Poultry

Next is the report on Poultry. Is Dr. Thorp in the room? Any member of the Poultry Committee? (Absent). What is your pleasure about the report, gentle-

Dr. Brumley: Mr. President, the report on Poultry was approved with the deletion of recommendations 10 and 11.

PRESIDENT BOWER: Are there any remarks? What is

your pleasure?

DR. HUSMAN: I move we accept the report and elimrecommendations 10 and 11 as the Executive Board suggested.

DR. McADORY: Second the motion.

PRESIDENT BOWER: Any remarks on the motion? All those in favor signify by saying "aye"; contrary the same.

Report of Committee on Nutrition

Next is the report of the Committee on Nutrition.

Does Chairman Metzger have anything to report?

DR. H. J. MRTZGER: Nothing further.

PRESIDENT BOWER: What is your pleasure on the Nu-

trition Committee report?

DR. HENDERSHOTT: Move it be approved.

DR. COUGHLIN: Second the motion.
PRESIDENT BOWER: It has been moved and seconded that the report of the Committee on Nutrition be accepted. Any remarks? All those in favor signify by saying "aye"; contrary the same. Carried.

Report of Special Committee on Rabies

Report on Rabies, Chairman Zepp.

DR. BRUMLEY: Mr. Chairman, the report on Rabies was approved by the Executive Board.

PRESIDENT BOWER: Does Chairman Zepp have anything to add to his report?

DR. ZEPP: No.

PRESIDENT BOWER: What are your wishes?

Dr. Coughlin: I move it be approved and the committee be continued.

DR. HUSMAN: Second it.

PRESIDENT BOWER: Moved and seconded that the report be approved and the committee continued. Any re-marks? All in favor signify by saying "aye"; contrary the same. Carried.

Report of Special Committee on Vital Statistics

Report on Vital Statistics.
Dr. Brumley: The Executive Board approved that re-

PRESIDENT BOWEE: Is Chairman Ouin in the room? (Absent)

DR. BROWN: I move it be adopted.

DR. McADORY: Second it.

PRESIDENT BOWER: Moved and seconded that the re port on Vital Statistics be adopted. Any remarks? those in favor say "aye"; contrary the same. Carried.

Report of Special Committee on Parasitology

Report on Parasitology, Dr. Simms is not present. Any

other member of the committee in the room?

Dr. Brumley: This report was also app. This report was also approved by the Executive Board.

DR. McADORY: I move it DR. HUSMAN: Second it. I move it be adopted.

PRESIDENT BOWER: Moved and seconded that the report on Parasitology be adopted. Any remarks? All in favor signify by saying "aye"; contrary the same. Car-

DR. HENDERSHOTT: Mr. President, you went pretty fast for me. I think it might be well for us to include in this suggested list of reportable diseases under cattle— you can just pass this on to the committee in any way -sarcoptic mange. Under poultry diseases, Newcastle disease has been diagnosed in the United States, it is of paramount importance that we have a report of its progress across the nation, and I think it is certainly indicative that that be included. Some of us are somewhat concerned about the possibility of European fowl pest or plague being introduced, and perhaps it might well be included. There is no reference to typhoid, and typhoid is in epidemic proportions in some states at the present time; coryza and infectious bronchitis.

PRESIDENT BOWER: Are you talking about parasitology?
Dr. HENDERSHOTT: I am talking about vital statistics,

animal disease vital statistics.

PRESIDENT BOWER: We have been passed that an hour.

(Laughter)

DR. HENDERSHOTT: I would like to have some of these included. You can do as you please about the rest of them, but I certainly think we would be remiss and be found and judged as short-sighted if, after a report from the Federal Bureau of Animal Industry that Newcastle disease exists in California and Utah, we completely ignored it in a compilation of a report of this sort.

PRESIDENT BOWER: Do I understand, Dr. Hendershott, that you are making these merely as suggestions for the next committee?

DR. HENDERSHOTT: No, I am making them as suggestions, that they be included in this report, if I may. I would like to see it brought up to date as nearly as possible.

EXECUTIVE SECRETARY HARDENBERGH: It is possible, Dr. Hendershott, that the official recognition of New-castle disease in this country came after this report was first prepared.

DR. HENDERSHOTT: I had note of it the first week in May.

EXECUTIVE SECRETARY HARDENBERGH: This report was prepared before then.

PRESIDENT BOWER: The next committee report is that of Food Hygiene. Is Dr. Seher in the room? (Absent)

Report of Special Committee on Food Hygiene

Dr. BRUMLEY: On Food Hygiene, this was approved with the first sentence of Recommendation 2 being reworded as follows:

That the possibility be investigated of organizing re-

fresher courses in cooperation with the meat packing in-dustry for veterinarians who engage in meat inspection."

PRESIDENT BOWER: You have heard the report of the
Executive Board on that committee report. What is your pleasure?

DR. W. A. BARNETTE (S. Car.): Move it be accepted as amended.

DR. HUSMAN: Second it.

PRESIDENT HOWER: Any remarks on the motion? All ose in favor signify by saying "aye"; contrary the Carried.

Next is the Committee on Brucellosis. Does Dr. Boyd wish to make further remarks?

Report of Special Committee on Brucellosis

DR. W. L. BOYD: No further report.
DR. BRUMLEY: This report was approved by the Executive Board.

PRESIDENT BOWER: You have heard the report of the Executive Board. What is your pleasure?

DR. HUSMAN: Move its adoption.

DR. McADORY: Second it.

PRESIDENT BOWER: Moved and seconded that the re-

port be adopted.

Dr. Hendershort: Mr. President, on page 5, in the left-hand column, under Calfhood Vaccination: "The vaccination of young calves in infected herds, where they are at all times exposed to virulent strains of Brucella, presents a situation entirely different from the vaccina-tion of calves in negative herds where they are not so exposed." I wondered what the difference was? I had another note here that is more important than that, and recommendations relative to adult vaccination. would be my suggestion that it be included in here, and I don't believe that it is included, that no adult animal should be vaccinated unless it has been blood-tested and found to be negative. Under no circumstances should such a recommendation to vaccinate animals be taken without having a negative test, and that negative test recorded.

reason behind this is that in the last report from Dr. Haring and Dr. Traum, two authorities in the United States who are probably better acquainted with the use of strain 19 on adult animals than possibly any other two individuals or any other individual, they caution against the vaccination of adult reacting animals, because, in their experience, in the work they did in California there was a tendency to prolong the reacting period of such treated animals for a considerable number of years, whereas naturally reacting animals not infrequently recover and become negative. So that there would be a disadvantage accrue to the owner of livestock were we to vaccinate reacting animals in his herd. Generally, it has been expected and thought that no harm could come of vaccinating adult reacting animals, and some of us have heretofore made the statement that we can't do them any harm, they are already reactors, so we thought, and many of us think we can't do them any good. In other words, we hold to the thought that, if an animal does not develop immunity through having an attack of virulent infection, little good will come out of vaccinating it with so-called moderated virulent organism.

They say, furthermore, in their report, "Our data on a large number of animals indicate no appreciable dif-erence to resistanc from infection was found between

vaccinated and non-vaccinated reacting cows."

Then there is a statement in this report, I believe, to the effect that vaccination of adults in Brucella-free herds should be discouraged. I think we should say it should be prohibited, save in connection with research problems. In other words, if someone engaged in research on brucellosis wants to study that problem, then it should be apropos that they go ahead, and perfectly all right. But, other than that, I think we should take a stand firmly that, in Brucella-free herds, no adult animal be vaccinated.

I had another remark to this effect, that, since practically all states have programs designed to control this disease, a majority of which are paying out public funds for service and indemnity, and practically all have laws, rules, and regulations dealing with the control of disease, it is imperative that this Association strongly commend strict observance by all members of our profession of the rules and regulations in effect in their states. I think that this matter is of strong enough importance and of sufficient importance almost to warrant a special paragraph by itself. I made mention of this the other evening and called the attention of the members of the

House of Representatives to the fact that paragraph 6 in the Code of Ethics deals with the subject matter. In conversation here at the meeting with some other veterinarians throughout the United States, I am more inclined to the view that there seems to be a general let-down of observance by members of our profession, or too many members of our profession, with the constituted legal authorities and the rules and regulations that are on the books in the various states with regard to the use of vaccine and the reporting of tests and the reporting of vaccinations by members of the profession. I think it is high time that the American Veterinary Medical Association, as a national body, call this to the attention of its membership and point out to them that their reluctance to comply fully with the laws, rules, and regulations of these various states in fact constitutes a violation by them of our Code of Ethics. That is all the comment I have.

PRESIDENT BOWER: Any further remarks?

DR. COUGHLIN: We need to continue the committee.

PRESIDENT BOWER: Was that in the motion or not, that this committee be continued?

DR. HENDERSHOTT: Definitely.

DR. HUSMAN: Yes.

PRESIDENT BOWER: Does the Chair understand, Dr. Hendershott, you offer this as an amendment to original motion?

DR. HENDERSHOTT: I do, sir.

PRESIDENT BOWER: Is there a second to the amendment?

DR. CARLISLE: Second it.

PRESIDENT BOWER: All in favor to amend as suggested by Dr. Hendershott signify by saying "aye"; contrary the same. All those in favor raise their right hand; all those opposed. The motion to amend is lost. Now the original motion to approve and continue the committee.
All those in favor signify by saying "aye": contrary the same. Carried.

The next is the report of the Local Arrangement Committee.

Report of Committee on Local Arrangements

DR. H. PRESTON HOSKINS: There is no report at this time but there will be after the meeting is over, PRESIDENT BOWER: And it will be published. Postwar Planning. Is Dr. Foust here?

Report of Special Committee on Postwar Planning

Dr. Brumley: Mr. President, this report was approved with the deletion of Recommendation No. 1.

PRESIDENT BOWER: You have heard the report of the Executive Board.

I move the acceptance with the dele-DR. BARNETTE: Dr. McApory: Second it.

port of the Postwar Planning Committee be accepted with the deletion as recommended by the Executive Board. Any remarks. All in favor signify by saying "aye"; contrary the same. Carried. PRESIDENT BOWER: Moved and seconded that the re-

Diseases of Horses. Is Dr. Gadd in the room? (Absent)

Report of Special Committee on Diseases of Horses

Dr. BRUMLEY: That report was approved by the Executive Board.

DR. HENDERSHOTT: Move it be adopted.

Dr. Husman: Second it.

PRESIDENT BOWER: Moved and seconded that it be adopted. All in favor signify by saying "aye"; contrary the same. Carried.

Report on Diseases of Small Animals. Is Dr. Theobald Do you wish to make any additional remarks?

Report of Special Committee on Diseases of Small Animals

Dr. A. R. THEOBALD: No remarks by the chairman.

DR. BRUMLEY: This report was approved with the exception of the recommendations for the creation of two special committees on page 11, just above the signatures of the committee members. In lieu of the latter, there was substituted the recommendation that the committee continued.

PRESIDENT BOWER: You have heard the report of the

Executive Board. Would you explain why that was done?

DR. BRUMLEY: I might say those recommendations were deleted because they called for the creation of two new committees, and it was felt that the original committee should take care of that work without the creation of any more committees; so, it is recommended that the committee be continued.

PRESIDENT BOWER: You have heard the explanation.

Do I hear a motion?

DR. KILLHAM: I move it be approved.
DR. HUSMAN: Second it .
PRESIDENT BOWER: It has been moved and seconded that this report be approved as amended. Any remarks? Those in favor signify by saying "aye"; contrary the same. Carried.

The next is the report on Diseases of Wild Animals.

Report of Special Committee on Diseases of Wild Animals

BRUMLEY: Mr. Chairman, that report was ap-

PRESIDENT BOWER: You have heard the report of the

Executive Board. What is your pleasure?
DR. HUSMAN: I move its adoption.

DR. HENDERSHOTT: Second it.

PRESIDENT BOWER: Moved and seconded that the report be approved. Any remarks? All in favor signify by saying "aye"; contrary the same. Carried. Next is the Committee on Motion Picture Library.

Report of Special Committee on Motion Picture Library

Mr. Chairman, the Executive Board approved it with the following changes: Recommenda-tion No. 2 was changed to read: "That the estabapproved it with the following changes: Recommenda-tion No. 2 was changed to read: "That the estab-lishment of a motion picture library be approved and that funds be provided for the purpose of defraying ex-penses incidental to starting such a library in accordance with a program to be worked out by the incoming

Recommendation No. 5 was deleted, since it is cov-

cred in Recommendation No. 2.

Dr. Hendershott: I move the adoption of the re-

port with the Executive Board's correction.

DR. HUSMAN: Second it.

PRESIDENT BOWER: Moved and seconded that the committee report be adopted, including the approval of the Executive Board's report. Any remarks? All those in favor signify by saying "aye"; contrary the same.

Report of the National Formulary, Veterinary Items.

Does Dr. Bergman wish to report?

Report of Subcommittee on Veterinary Items, National Formulary Committee

Dr. H. D. Bergman: Mr. Chairman, this is merely a brief report of progress. I should be very glad to present it or file it with the secretary, whatever your

PRESIDENT BOWER: You have heard the report of the committee. What is your pleasure?

DE. HUSMAN: I move its adoption.

DR. HENDERSHOTT: Second it.

PRESIDENT BOWER: Moved and seconded that the report be adopted. Any remarks? All those in favor signify by saying "aye"; contrary the same. Carried.

Report of Representative on Inter-Association Council on Animal Disease and Production

The next is the report of the Inter-Association Coun-

cll on Animal Disease and Production. Has the Board

anything on that?

DR. BRUMLEY: That was approved, Mr. President.

DR. HUSMAN: Move its adoption.

DR. McAdory: Second it.

PRESIDENT BOWER: Moved and seconded the adoption of the report, Any remarks? All in favor signify by saying "aye"; contrary the same. Carried.

I believe that concludes all committee reports.

DR. HUSMAN: How about History?
PRESIDENT BOWER: There is no report on history. There was none submitted.

Action on Proposal for Honorary Membership

That brings us up to action on the proposal that was presented last evening for honorary membership. I do not know whether you were all here last night. The name of Mr. Will J. Miller, Live Stock Commissioner of Kansas, was proposed for his activities in regulatory work, in animal disease control, for honorary member-What is your pleasure?

DR. M. P. SCHLARGEL (Kansas): Mr. President, I move that we extend the privileges of honorary membership to Will J. Miller.

PRESIDENT BOWER: Do I hear a second?

DR. HENDERSHOTT: Second it.

DR. HUSMAN: Second it.

PRESIDENT BOWER: Moved and seconded that we extend the privileges of honorary membership to the Honorable Will J. Miller.

HENDERSHOTT: I would like to make remarks because I was somewhat acquainted with the work Bill Miller did in Washington. I think this man certainly is deserving of validation to our roll of honorary

membership. I met with him on March 13, 14, and 15, in Washington, when plans were being laid for the activities of connection with the groups in appropriation for reclassification of federal bureau employees, which provided under the Reclassification Act of 1923. I know that this man gave tirelessly of his time and expended of the funds of associations in which he holds membership in the great State of Kansas, is deserving of some credit in that connection.

I sat in the Hotel Statler while he made calls that staggered my imagination as regards the telephone tolls that would be involved in connection therewith, in endeavoring to get the approval of the livestock raising groups to a statement that was to go out in support of this legislation. I know that he made at least three trips to Washington in connection with this particular matter and that he spent his entire time, attacking the opponents of this piece of legislation. I am quite confident that had it not been for his acquaintanceship in the halls of Congress and his energy expended along this line, perhaps we would not have been successful in obtaining our goal. I think we owe him a great deal, and I am happy to know the Association is going to honor him as an honorary member of the AVMA.

PRESIDENT BOWER: All in favor of the motion signify

by saying "aye"; contrary the same. Carried.

Is there any unfinished business to come before the Does the secretary have any unfinished busi-

EXECUTIVE SECRETARY HARDENBERGH: No unfinished

PRESIDENT BOWER: Any new business to come before the House? I might call your attention to a piece of public relations work that has been started by the You mis. These, Nebraska Veterinary Medical Association. Nebraska Veterinary Medical Association. You might be interested in looking at some of the copies. These, I understand, are to be placed in the schools. I haven't had a chance to look at it but it seems to be a good way of letting our future homemakers and farmers know something about veterinary medicine.

Any new business?

Dr. Husman: I move we adjourn.
Dr. McApony: Second it.
. . . The meeting adjourned at 10:85 p. m. . . .

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*Until Nov. 1, 1944, address is: Bureau of Animal Industry, U. S. Dept. of Agriculture, Washington, 25, D. C.

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- C. E. Fidler, State Veterinarian, Springfield, III.
- H. C. Givens, 1102 State Office Building, Richmond, Va.
- Vego Mikkelson, 217 Capitol Bldg., Phoenix, Ariz.

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- P. G. Mackintosh, Box 856, Yakima, Wash.
- John D. Gadd, 707 York Rd., Towson 4, Md.
- D. L. Proctor, 617 Price Ave., Lexington, Ky.

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- S. E. Phillips, 1455 N. Riverside, Medford, Ore.
- C. E. Bild, Box 515, Little River Sta., Miami 38, Fla.
- K. W. Smith, Colorado State College, Fort Collins, Colo.

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- J. E. Shillinger, Highland, Howard County, Md.

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- E. C. Khuen, 3227 Thayer St., Evanston, Ill.

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- Cliff D. Carpenter, Institute of American Poultry Industries, 110 N. Franklin St., Chicago, Ill.
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- H. H. Dukes, New York State Veterinary College, Ithaca, N. Y.
- W. H. Feldman, 926-8th Ave., S.W., Rochester, Minn.
- W. A. Hagan, New York State Veterinary College, Ithaca, N. Y.
- A. W. Miller, Bureau of Animal Industry, U. S. Dept. of Agriculture, Washington 25, D. C.

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- B. T. Simms, Animal Disease Research Laboratory, Auburn, Ala.
- Brig.-Gen. R. A. Kelser, Office of Surgeon General, U. S. Army, Washington 25, D. C.
- A. W. Miller, Bureau of Animal Industry, U. S. Dept. of Agriculture, Washington 25, D. C.

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- James Farquharson, Chairman, Colorado State College, Fort Collins, Colo.
- M. Barker, Veterinary Director General, Health of Animals Branch, Dominion Department of Agriculture, Ottawa, Ont.
- Charles W. Bower, 3119 Stafford St., Topeka, Kan.

- Guillermo Q. Bravo, Director General, Livestock Division, Department of Agriculture, Mexico, D.F.
- F. N. Camargo, Ajusco No. 2, Ville Obrego N., Mexico City, Mexico.
- Brig.-Gen. R. A. Kelser, Office of Surgeon General, U. S. Army, Washington 25, D. C.
- A. W. Miller, Bureau of Animal Industry, U. S. Department of Agri., Washington 25, D. C.

Research Council

- ANATOMY AND HISTOLOGY.—H. L. Foust, Division of Veterinary Medicine, Iowa State College. (1946)
- BACTERIOLOGY (IMMUNOLOGY AND BIOLOGIC THER-APY).—Edward Records, University of Nevada. (1947)
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- POULTRY PATHOLOGY.—C. A. Brandly, 25 Shattuck St., Boston 15, Mass. (1945)
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